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FISHERIES CO-OPERATION WITH ICELAND AND NORWAY

NOTE

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POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

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NOTE

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Abstract

This Note examines the situation in the fishery for highly migratory fish stocks in the North East Atlantic. It presents an overview of the legislation for management of the stocks and considers two case studies: for Herring and Mackerel. It looks at the potential impact of the reformed CFP and considers how future co-operation could be achieved among the Coastal States with a stake in the fishery for mutual benefit.

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LIST OF ABBREVIATIONS

CFP	Common Fisheries Policy
EEZ	Exclusive Economic Zone
EU	European Union
ICES	International Council for the Exploration of the Sea
NEAFC	North East Atlantic Fisheries Commission
RAC	Regional Advisory Committee
SSB	Spawning Stock Biomass
TAC	Total Allowable Catch
UNCLOS	United Nations Convention on the Law of the Sea
UNFSA	United Nations Fish Stocks Agreement
UNO	United Nations Organisation

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EXECUTIVE SUMMARY

Background

North East Atlantic waters provide some of the richest fisheries in the world. They fall partly in the Exclusive Economic Zones (EEZs) of the European Union, the Færoe Islands, Greenland, Iceland, and Norway. The small remaining area represents international waters.

These states (with the Færoes and Greenland represented by Denmark) constitute the Coastal States, in association with the Russian Federation as a nation with a Distant Water interest, required by United Nations (UNO) conventions and agreements to manage the fisheries for highly migratory and straddling stocks. This they do through the North East Atlantic Fisheries Commission.

In the most important of these fisheries, those for Norwegian Spring-spawning Herring and for Mackerel, disputes have arisen among the Coastal States over the level of Total Allowable Catch (TAC) to be set and the allocation of the TAC as national quotas. This has resulted in failure to reach agreement, the setting of unilateral quotas, bilateral agreements outside the requirements of the UNO system and the imposition of sanctions on the Herring and Mackerel products of the Færoes and Iceland.

Aim

The aim of this Note is to consider the current situation in the fishery for highly migratory and straddling fish stocks in the North East Atlantic.

The fishery has been an important component in the economies of the Færoe Islands (a Danish administrative region outside the EU), Iceland, Norway and some EU Member countries, notably Ireland and Scotland. The EU, Færoes, Iceland and Norway form the Coastal States responsible for managing the fishery which extends from their Exclusive Economic Zones into international waters.

Scope

The area of interest is defined as ICES Area 27 and stretches from Iberia in the south into the Arctic Circle in the North and from Greenland in the west to the Skagerrak in the East.

To achieve the objective, this Note gives an overview of the existing common regulatory measures applying to the fish stocks shared between the EU, Iceland and Norway and undertakes an assessment of the impact of the entry into force of the reformed CFP, due in January 2014.

Two case studies are set out; for the Norwegian Spring-Spawning Herring stock mostly found north of 62°N, and for the Mackerel stock of ICES Area 27.

Recent Developments and the Future

Given the recent failure of negotiations to set commonly agreed TACs for Herring and Mackerel, the Note examines the advantages of EU co-operation with the Færoe Islands (which, for the purposes of fisheries, act as an independent entity), Iceland and Norway and considers the challenges that have presented themselves to date.

The failure of negotiations is set against a background of several economic factors. It is not thought that the Coastal States have suffered from the impact of the banking crisis on gross domestic product to the extent that it would have put pressure on their negotiating stances. The exception is Iceland whose economy has suffered very considerably as a result of the banking crash. Nevertheless, there is little evidence to suggest that even here the state of the Icelandic economy has been a significant factor.

Reform of the Common Fisheries Policy is unlikely to have any impact on the situation and the reforms proposed are consistent with current management of the fishery. The reforms bring better practice to the management objectives of the EU Member States. The fisheries are managed with the objective of attaining Maximum Sustainable Yield, and EU fleets already operate tradeable fishing rights systems, with the exception of Ireland.

While the principal advantage of co-operation lies in obtaining the maximum return for the participants, there are additional benefits in preserving the structure of local communities dependent on the fishery for which few alternatives exist.

Consumers stand to benefit from an abundant supply of a valuable protein food; exporters will have an abundant supply of product to which they can add value.

There have now been sufficient years of failure to agree TACs and national quota allocations that it is possible to conclude that the system of management has broken down. A new approach is needed but this remains possible within the NEAFC. The system currently recognises only changes in the size of the fish stocks. The need is to recognise also their spatial variability.

Solutions to the current problem depend on finding a long-term system of allocating the TACs between the Coastal States and Distant Water Fishing Nations need to recognise not only the size of the stocks but also their changing locations resulting from changes in their migration patterns.

KEY FINDINGS

- The waters of the North East Atlantic comprise some of the richest fishing grounds in the world.
- The valuable stocks include Blue Whiting, Capelin, Herring, Horse Mackerel, Mackerel and Sardines, all shoaling species whose migrations straddle the Exclusive Economic Zones of the Coastal States.
- All stakeholders stand to gain from co-operation in the management of the Norwegian Spring-spawning Herring and Mackerel fisheries of the North East Atlantic through joint agreement on a TAC for the stocks.
- The recent economic recession has not been a significant cause in the failure to reach agreement.
- The migration patterns of the Norwegian Spring-Spawning Herring and of the Mackerel stocks are not stable.
- Norwegian Spring-spawning Herring has recovered from the collapse of the early 1970s but has shown a decline of 30% from the peak of 2007.
- Mackerel stocks have increased to levels not seen since the 1970s. The TAC recommended by ICES for 2014 is 60% higher than for 2013.
- The sum of the quotas set for 2013 for Mackerel and reported as being agreed for 2014 is above the TACs recommended by ICES on the basis of the Precautionary Approach and may lead to a decline in the stock size if the situation continues.
- Unilateral and bilateral quotas recently set do not reflect the scientific advice from ICES on safe levels of exploitation.
- Failure to reach agreement will lead to declining stocks. This is most likely to impact on the Færoese and Icelanders as the Norwegian Spring-spawning Herring and Mackerel appear to retreat to EU and Norwegian waters when stocks are smaller.
- By ensuring agreement, coastal communities dependent on the fishery can adapt at a more leisurely pace to the changes in employment opportunities and income.
- Consumers will benefit from a regular and relatively abundant supply of a valuable protein food at affordable prices.
- Exports will benefit from the comparative advantage in trade created by an abundant resource.
- There is a danger of being overwhelmed by the complexity of the behaviour of the Herring and Mackerel. In essence the question for managers may be simply put: it is one of finding a stable means of allocating agreed TACs as national quotas for species whose size and location varies. Currently the system only recognises changes in stock size.

1. BACKGROUND

KEY FINDINGS

- The waters of the North East Atlantic comprise some of the richest fishing grounds in the world. They are home to a number of pelagic (shoaling) species including Norwegian Spring-spawning Herring and Mackerel which straddle and migrate through the Economic Exclusion Zones (EEZs) of the Coastal States.
- The stocks are fished by fleets from Denmark, the Færoes, Iceland, Ireland, the Netherlands, Norway, the Russian Federation and the UK (Scotland).
- The system of drawing up agreements on the level of TACs and division of the TACs between participating countries has broken down.
- Except perhaps in the case of Iceland, economic pressures arising from the current recession have not contributed to the breakdown of the talks based on the Convention on Multilateral Co-operation in North East Atlantic Fisheries.

1.1 Fish Stocks and Fishing Nations

The waters of the North East Atlantic comprise some of the richest fishing grounds in the world. The fisheries are expansive and partly fall within the Exclusive Economic Zones of the European Union, the Færoe Islands[1], Greenland[1], Iceland, and Norway. The remainder of the area represents international waters.

Among the valuable fish stocks are Blue Whiting, Capelin, Herring, Horse Mackerel, Mackerel and Sardines, all pelagic species with a migratory habit. Within these stocks there are a number of separate stocks with different behavioural patterns but all of which follow the basic pattern of congregating into large shoals, swimming close to the surface, which migrate to their feeding and spawning grounds.

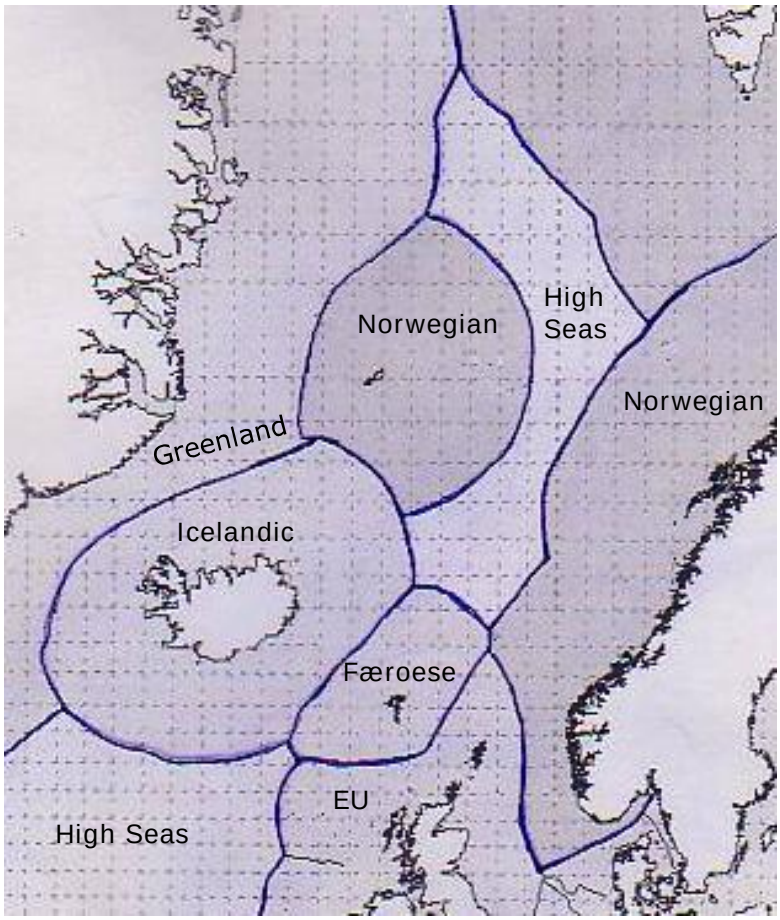
The migrations inevitably move through the EEZs of the differing Coastal States. In recent years their exploitation has provided an important part of the income of the economies of the states which fish them.

Denmark, the Færoes, Iceland, Ireland, parts of the Dutch and Norwegian economies, the Russian Federation and within the UK, parts of Scotland, provide the principal fleets which join the fishery. However, the patterns of migration lie at the heart of the problem of finding agreement among the Coastal States for the management, and more particularly the allocation of rights to fish the stocks.

The reason is that the migration patterns have periodically changed. The two principal causes appearing to be sea temperatures and fish stock abundances.

[1] The Færoe Islands and Greenland are Self-Governing Administrative Regions of Denmark outside the European Union. The Danish Government, and hence the European Commission, treats them as independent entities for the purposes of fisheries matters, and this approach is therefore followed in this report.

Map 1: The Exclusive Economic Zones of the North East Atlantic Ocean



Source: Norwegian Fisheries Ministry.

There has been a history of conflict over the exploitation of the fish stocks, and the European Union has sought to address these by entering into a variety of agreements relating to the waters of the North East Atlantic. These have included bilateral, trilateral and neighbouring agreements, participation frequently being determined by the source of the disagreement.

By and large, the nations involved have succeeded in completing the difficult and complex task of allocating among themselves the rights to fish the stocks.

However, in 2009, this process began to break down. Until then, scientific advice had suggested that the fish stocks of Herring and Mackerel were under severe pressure but around that time the stocks, particularly of Mackerel, began to show an expansion. This caused them the revert to migration patterns, presumably in search of food, not witnessed for many years. This meant that they spent a greater proportion of their time in the waters of some nations, notable the Færoes and Iceland, than they had previously done.

Now, once again, conflict has arisen with there being no general agreement for 2013 setting overall Total Allowable Catches for Herring and Mackerel. The Coastal States, except the Færoes, have reached agreement for the exploitation of the Herring in 2013 and the European Union and Norway have reached a bilateral agreement for the exploitation of Mackerel.

Failure to come to agreement with the Færoes and Iceland has led to the imposition of sanctions by the EU. These sanctions have taken the form of banning the import of Færoese and Icelandic caught Herring and Mackerel.

1.2 The Economic Situation in Coastal States

The recession induced in the European economy by the banking crisis of 2008 has affected the Coastal States differently.

The most seriously affected was the Icelandic economy where the government had been in the course of trying to establish a more broadly-based economy by expanding into banking, the very industry that was to be the source of the recession.

The Icelandic economy had been 35% dependent on fisheries, a level which made Iceland vulnerable to changes in the fortunes of the fishery and a broader spread of sources of income seemed a wise move. Further, banking services appear to have a higher income elasticity of demand than primary products like fish and so offer the possibility of enjoying faster economic growth rates. The existence of sanctions is therefore doubly unfortunate.

The Færoese economy is even more dependent on the fishery but this seems to have been of less concern to the local administration, perhaps because the alternative business options and occupations available, or likely to be available, among such a small population could not hope to provide the standard of living offered by the fishery.

Otherwise, the Norwegian economy and those of the EU member states which exploit the fisheries of the North East Atlantic are much less dependent on the contribution of the fishery to income and gross domestic product. However, this rather glosses over the place of fisheries.

The great importance of the fisheries to an entire category of localities is not to be underestimated; local dependency on the fishery in some parts of the EU sometimes approaches that of Iceland. The fishery and the employment in fish processing based on its product remains a significant provider of income and local gross domestic product in many peripheral areas.

Some comparative economic statistics are set out below in Table 1. In general, and with the exception of Iceland, it can be concluded that added economic pressures brought about by the recession in Western economies following the banking crash of 2008 have not contributed to a breakdown of the mechanism for allocating TACs and national quotas in the fisheries for Norwegian Spring-spawning Herring or Mackerel.

For Iceland, there may be some advantage in accepting current earnings at the expense of those in the future (especially if the abundance of fish stocks proves to be a temporary feature phenomenon) in order to promote recovery in the Icelandic economy.

Table 1 : Key Statistical Data on the Economies of the Coastal States

2011	FÆROES	ICELAND	NORWAY	EU
Population	49 500	320 000	5m	504m
GDP (EUR bn[1])	1.1	10	388	12 923
GDP per capita, 2012 (EUR)	22 400 (2010)	32 900	77 500	23 200
Growth rate, 2012 (%)	2.9 (2010)	1.4	3.1	-0.4
Unemployment rate, July 2013 (%)	6.8 (Dec 2011)	5.6	3.6	10.9
Inflation rate, 2011 (%)	2.3	6.0	0.4	2.6

[1] American usage of billion i.e. 1bn = 10^9

Source: Eurostat, CIA World Factbook.

2. AN OVERVIEW OF EXISTING COMMON REGULATORY MEASURES APPLYING TO STOCKS SHARED BETWEEN THE EU, ICELAND AND NORWAY

KEY FINDINGS

- Management of the North East Atlantic Fisheries takes place under the 1995 United Nations Fish Stocks Agreement for the management of straddling and highly migratory fish stocks which led to the establishment of the North East Atlantic Fisheries Commission (NEAFC).
- The member states of NEAFC are charged with the duties of setting TACs, dividing them into national and managing the international fishery.
- NEAFC has been unable to secure agreement among the Coastal States, and the system has fragmented into a series of unilateral and bilateral quotas which do not reflect the scientific advice from ICES on safe levels of exploitation.

2.1. The 1995 United Nations Fish Stocks Agreement

Management of the North East Atlantic Fisheries takes place under the umbrella of a number of United Nations agreements and conventions of cascading form, each adding to the precision of the previous level of agreement.

The foundation treaty for the management of straddling and highly migratory fish stocks is the 1995 United Nations Fish Stocks Agreement. Straddling stocks are those fish stocks whose natural territory encompasses the exclusive economic zone of more than one coastal state. Highly migratory fish stocks are those that move between exclusive economic zones.

The agreement requires these stocks to be managed by a Regional Fisheries Management Organisation, comprised of the Coastal States and Distant Water Fishing Nations. Coastal States are defined by the United Nations Convention on the Law of the Sea as states (nations) where a migrating fish stock is found in, or enters the waters of, its 200 mile exclusive economic zone. Distant Water Fishing Nations are those other than the Coastal States which have a track record of taking part in a fishery.

2.2 The North East Atlantic Fisheries Commission

The RFMO relevant to the issues and fish stocks considered in this report is the North East Atlantic Fisheries Commission. Its responsibilities stem from the Convention on Multilateral Co-operation in North East Atlantic Fisheries signed by the EU, Denmark (separately from the EU on behalf of the Færoe Islands and Greenland), Iceland, Norway and the Russian Federation, and which came into force in November 1982.

Herring and Mackerel are among the widely distributed straddling and/or migratory stocks for whose management the NEAFC has responsibility under the UNFSA. Herring and Mackerel are the only species over which there has been significant continuing and unresolved conflict, perhaps because of their size and importance to the nations involved in the fishery, though there have also been disputes over Blue Whiting.

2.3. The Role of the Coastal States

Coastal States are responsible under UNCLOS for the sustainable management of their fisheries in collaboration with the other Coastal States which have a right to exploit a fish stock. This is to be achieved by agreeing a Total Allowable Catch and enforcing it among vessels of their own nationality.

Since the end of the Second World War, Mackerel and Herring have been fished in the North East Atlantic by a number of EU member states, notably but not exclusively Denmark, France, Germany, Ireland, Netherlands, and the UK (mainly by vessels from Scotland). Joining them have been vessels from the Færoe Islands, and Norway. The Russian Federation has also played a (relatively minor) role. The Coastal States with management responsibilities under the UNFSA were thus defined as the EU, Færoe Islands and Norway.

While the Herring fishery had a long history, the Mackerel fishery became of growing importance from a position where a relatively small catch of 83 000 tonnes was reported in 1950 to a peak of just over 1 million tonnes in 1967, a level of catch which has not been seen since. Icelandic catches reported were almost non-existent until 2008, the highest being less than 5 000 tonnes in 1974. However, Icelandic landings of more than 100 000 tonnes in 2008 led to Iceland becoming a fourth signatory to the Coastal States Agreement.

2.4 Failure of the Coastal States to Agree TACs

Following the signing of the Convention on Multilateral Co-operation in North East Atlantic Fisheries, the relevant Coastal States of the North East Atlantic Fisheries Commission, the EU, Færoe Islands and Norway agreed a system for determining a TAC and allocating it among the parties. Iceland, being recognised as a fourth Coastal State in 2009, joined the process for deciding the management plans. However, the last occasion on which this process reached a conclusion for the Mackerel stock was in 2008 with a TAC set for 2009. The Færoese have set their own TAC for Herring for 2013 and both they and Iceland have continued to set unilateral TACs for Mackerel.

The EU and Norway reached a bilateral agreement establishing a 10-year Mackerel management plan in 2010. This created a TAC based on ICES advice and perpetuating the system of dividing the TAC into national quotas as had been done in the previously applied tripartite Coastal States agreements. The system is based on the track record and ICES advice, and is not dissimilar to the system of Relative Stability used for quota allocation under the CFP.

3. TWO CASE STUDIES

KEY FINDINGS

- The migration pattern of Norwegian Spring-Spawning Herring has changed periodically for reasons which are unknown. The stock has recovered from the collapse of the early 1970s but has shown a decline of 30% from the peak of 2007.
- The unilateral and bilateral quotas set for 2013 threaten to continue the reduction of the stock of Norwegian Spring-Spawning Herring eventually to below the biologically acceptable minimum if no resolution to the dispute is found.
- In the last ten years Mackerel stocks have increased to levels not seen since the 1970s. The TAC recommended by ICES for 2014 is 60% higher than for 2013.
- The migration pattern of Mackerel has changed. Two causes have been mooted; changes in water temperature and the increased size of the Mackerel stock.
- The sum of the quotas set for 2013 and reported as being agreed for 2014 is above the TACs recommended by ICES on the basis of the Precautionary Approach and may lead to a decline in the stock size if the situation continues.

3.1. Herring

There is a number of stocks of Herring in ICES Area 27, including the Icelandic Spring- and Summer-Spawning Herring which spawn in Icelandic waters, four components of North Sea Herring which spawn in the North Sea and English Channel, and the Norwegian Spring-Spawning Herring. This case study examines the Norwegian Spring-Spawning Herring

3.1.1 Management of the Norwegian Spring-Spawning Herring Stock

An agreement on management of the stock was signed in 2007 by the Coastal States; the EU, the Færoe Islands, Iceland and Norway, with the Russian Federation recognised as having a Distant Water interest.

While the stocks remain inside the Exclusive Economic Zones of a coastal state, their management falls exclusively within the jurisdiction of that state, but once they migrate to the high seas they can be fished by any nation. To consider the implications of this situation, this case study examines one component, the Norwegian Spring-Spawning Herring.

In the 1950s and 1960s the Norwegian Spring-Spawning Herring was abundant and the stock enjoyed a migratory cycle, with the mature fish moving from the Norwegian coast in

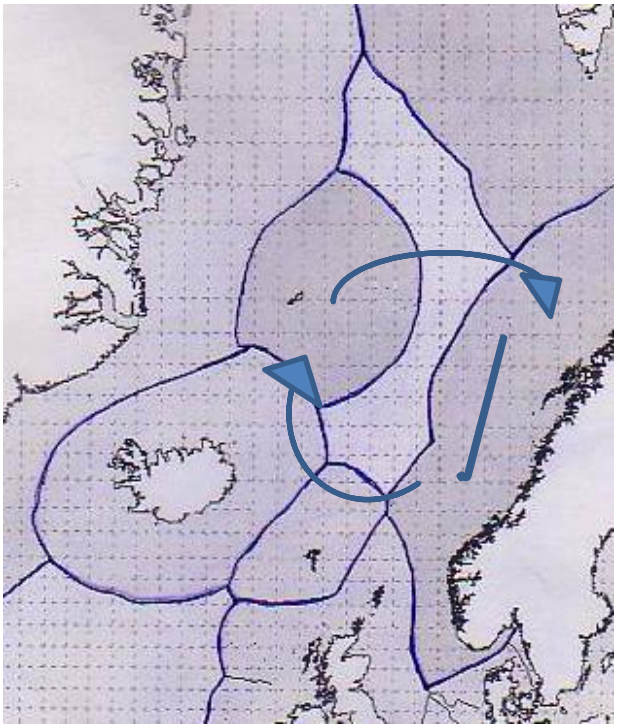
early Spring towards Iceland, off whose northern coast they would spend the summer before wintering east of Iceland and returning to the Norwegian coast to spawn.

In the mid-1960s a more northerly component appeared, spawning south of the Lofoten Islands and moving into the Norwegian Sea and then the Barents Sea before returning south to the spawning grounds. By 1966 the northern component was the larger of the two.

The advent of the power block and fish finders in the 1960s served to provoke a collapse of the stocks (a common pattern with most Herring fisheries).

Various measures, including a moratorium were imposed but it took more than 20 years for the spawning stock to recover to the minimum biologically acceptable level. During this period of severe depletion, the adult stock remained in Norwegian waters all year round, the annual migrations ceasing.

Map 2: The Recent Migration Pattern of Norwegian Spring-Spawning Herring

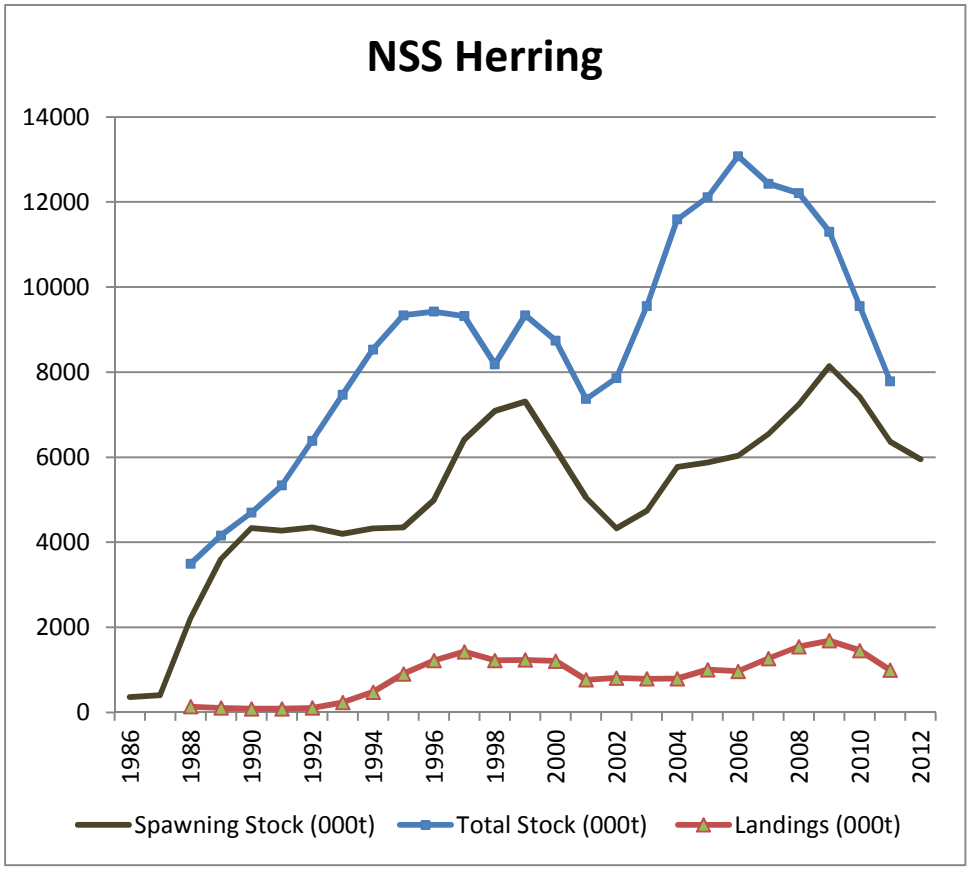


Source: Norwegian Fisheries Ministry.

The recovery of the late 1980s, seen in Figure 1 below, has been followed by the return of migration, now westwards from the Norwegian coast through the EEZs of the EU, Færoe Islands, and Iceland, and then through the international waters known as the Ocean Loophole to their summer feeding grounds at Jan Mayen Island.

They then have moved to north Norway, though the location has been variable, before returning south to the spawning grounds.

Figure 1: Stock Sizes and Landings by Volume of Norwegian Spring-Spawning Herring, 1985 to 2012



Source: ICES.

The 2007 agreement gave Norway 61.00% of the TAC, Iceland 14.51%, EU 6.51%, and the Russian Federation 12.82%. A TAC of 619 000 tonnes set for 2013 was considered to offer sustainable fishing. Under the 2007 agreement the Færoe Islands were granted 5.16% of this but in 2013 withdrew from the agreement, claiming a greater share.

The EU, Iceland, Norway and Russia made a four-party agreement in accordance with their shares set in 2007 and set aside 31 940 tonnes for the Færoes, but the Færoes announced a quota of 105 239 tonnes.

3.1.2 Response of Herring Stocks to the Current Level of Catches by the EU, Færoe Islands, Iceland and Norway

ICES reported in May 2013 that it believed that the spawning stock of Norwegian Spring-Spawning Herring has been over-estimated by an average of 26% over the period 1997 to 2011 but concluded that the reference points for management, B_{lim} the minimum biologically acceptable level of 2.5mt, B_{pa} the minimum acceptable level under the Precautionary Approach of 5mt, and F_{MSY} the level of catch consistent with providing the maximum sustainable yield of F=0.15, remained unchanged.

Table 2: Allocation Key for the Norwegian Spring-Spawning Herring TAC as National Quotas

STATE	PERCENTAGE SHARE OF TAC UNDER 2007 AGREEMENT	TRANSLATION OF PERCENTAGE TO TONNAGES (2013)
Norway	61.00	377 590 t
Russia	12.82	79 356 t
Iceland	14.51	89 817 t
EU	6.51	40 297 t
Færoe Islands	5.16	31 940 t (Unilateral for 2013 105 230t)
Total	100	619 000 t (with Færoese unilateral TAC 692 290 t)

Source: Norwegian Fisheries Ministry and Author.

ICES's suggestion of over-estimation of the SSB has come at a time of prosperity in the fishery with an abundant stock based on the unusually large recruitment of 2009. In the face of this, reducing the TAC on the basis of a falling SSB (from 8 mt in 2009 to 6 mt in 2012) is fraught with difficulty.

The basis of Færoese thinking appears to be that the opportunity to exploit the huge 2009 year class will be lost for no benefit if not fished, and that TACs that reflect the fishing opportunities are not necessarily in conflict with preserving the SSB. Recruitment is in practice highly variable, commonly varying by a factor of 4 and often much more.

3.1.3 Expected Evolution of the Present-Day Herring Stock

Given the uncertainty surrounding the accuracy of landings data, the estimates of SSB and the natural variability of the fishery, it is impossible accurately to predict any long term trends. Much depends on the behaviour of the Coastal States as the 2009 year class recedes into history.

It would appear that continuing to fish at the levels proposed for 2013 would threaten a decline in both the fishable stock and the SSB to the detriment of the fleets of all countries prosecuting the fishery.

If recruitment of young fish to the stock continues at closer to average levels in the next few years then revised and lower agreed TACs in the future consistent with ICES conservative advice might mean that no harm is done to the sustainability of the fishery and future income from it.

3.2 Mackerel

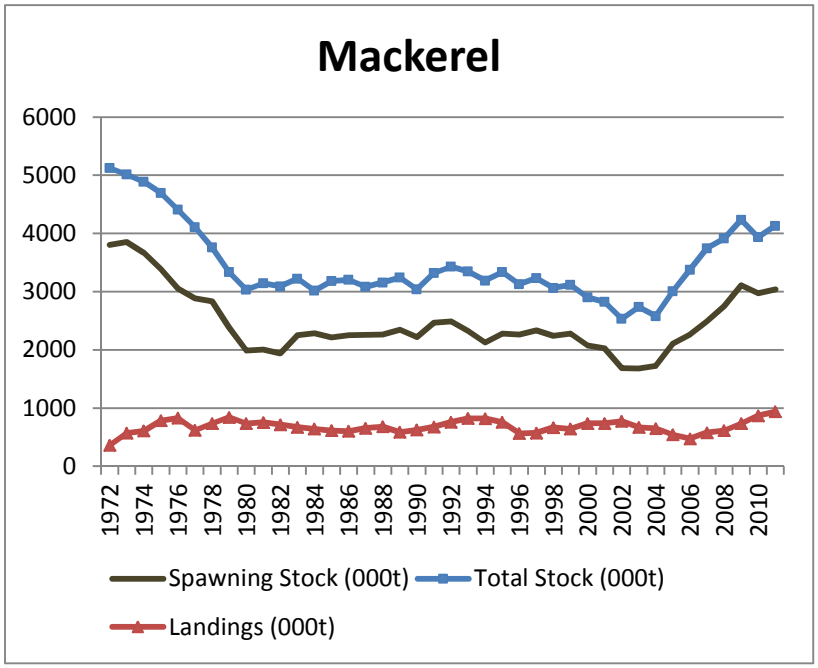
The Mackerel is a pelagic species widely distributed throughout the waters of the North-East Atlantic. There are three spawning components, known as North Sea, Southern and Western.

3.2.1 Management

The North East Atlantic Fisheries Commission is charged with the responsibility of managing the fishery. The stock is managed by an overarching TAC which is set by the Coastal States of which there are now four – The Færoe Islands, Iceland, Norway, and the EU.

The TAC is shared among the fishing nations and the Russian Federation is recognised as having an interest by virtue of being a Distant Water Fishing Nation. However, beginning in 2010, the Coastal States have not been able to reach agreement on the total and the shares of the TAC.

Figure 2: Stock Sizes and Landings by Volume of North East Atlantic Mackerel, 1972 to 2011



Source: ICES.

It was being reported in the press at the time of writing that an agreement had been reached between the EU, Iceland and Norway for the allocation of the 2014 TAC (Fishing News 2013). This remains to be confirmed but the unofficially published figures have been included in Table 3.

Table 3: TAC and Quota Allocations for Mackerel Stocks in the North East Atlantic

	2010	2011	2012	2013	2014
TAC Range recommended by ICES	527 000 to 572 000 t	592 000 to 646 000 t	586 000 to 639 000 t	497 000 to 542 000 t	889 886 t (EUR 1 068m)
SSB at end of previous year	3.00 mt	2.93 mt	2.68 mt	3.90 mt	Unknown
Autonomous Færoese Quota	85 000 t	150 000 t	148 375 t	125 854 t (4.63%	106 786 t (12% allocated)

	2010	2011	2012	2013	2014
				allocated)	(EUR 128m)
Autonomous Icelandic Quota	130 000 t	146 818 t	145 000 t	123 182 t (0% allocated)	105 896 t (11.9% allocated) (EUR 127m)
Joint EU/Norwegian Quota	548 014 t	586 663 t	576 670 t	491 989 t EU allocated 64.5% Norway 26.5%)	605 122 t (EU allocated 46.7% Norway 21.3%) (EUR 726m)
ICES estimated Landings	862 000 t	930 000 t	877 000 t	880 000 t	na

In each year the remainder of the TAC has been allocated to the Distant Water Fishing Nations but Greenland has been allocated 3.6% for 2014. Values estimated assuming a price of EUR 1 200 per tonne.
Source: ICES, Fishing News.

3.2.2 Response of Mackerel Stocks to the Current Level of Catches by the EU, Færoe Islands, Iceland and Norway

The progress of the fishery is set out in Table 3 below. The difficulty is that ICES estimates of landings are simply the TACS announced by the parties minus an estimate of discards. The underlying feature is perhaps a view among the Færoese and Icelanders that the ICES estimates of the spawning stock biomass have been underestimated.

It should be noted that the current levels of catch reported by ICES for 2010 to 2012 are estimates based on the assumption that the whole of the quotas announced by the Coastal States will be taken. It would represent considerable increases in the level of landings taken by Færoese and Icelandic vessels in their own waters, and therefore large increases in capacity.

Whether these two countries have been able to switch resources to exploitation of the declared autonomous quotas remains to be seen.

ICES has suggested that, based on egg surveys, preliminary estimates indicate that the SSB increased by 30% between 2010 and 2013, despite expected significant levels of over-fishing, were the TACs accurately to reflect the levels of catch.

In this respect, ICES scientists are at a considerable disadvantage to the fishing industry because of the delay in collecting and analysing data and making the necessary projections. In addition the models must by virtue of their nature be based on historic performance, and will be deficient in so far as the stocks adopt new patterns of migration.

The prudent view of ICES arising from the Precautionary Approach is therefore as understandable as the less patient feelings of fishermen whose view of their catches is immediate but unscientific.

3.2.3 Expected Evolution of the Present-Day Mackerel Stock

ICES has been unable to provide advice based on the management plan in 2013 on the condition of the North East Atlantic Mackerel stock because there is no accepted analytical analysis. Mackerel has only been a significant target fishery for Icelandic vessels since 2008, and this as a consequence of growing fishing opportunities in their own waters.

Catch data prior to 2005 are, in general, considered unreliable and have had the effect of producing results which ICES has acknowledged are apparently increasingly unreliable. ICES has decided to adopt a different assessment model for 2014.

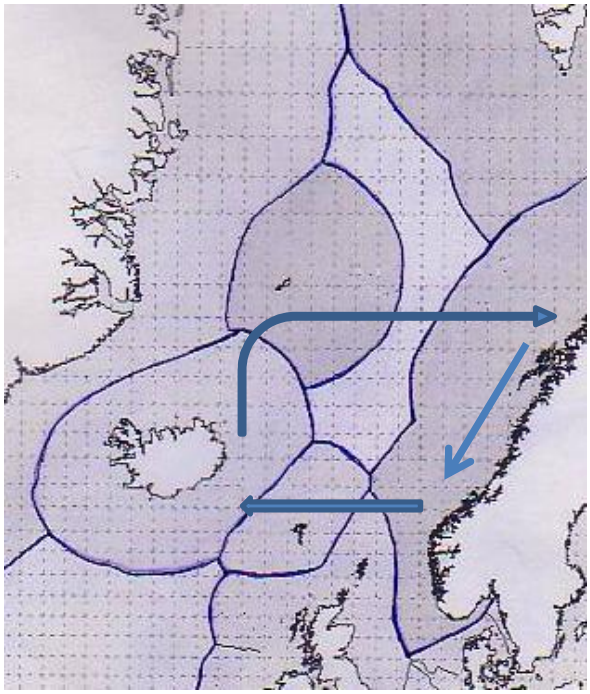
This leaves the evolution of the stock subject to speculation. It is noticeable that the TAC reported to have been agreed by the Coastal States for 2014 is 64% higher than that recommended by ICES for 2013. It reflects the ICES recommendation which is based on the average catch over the past three years under the assumption that the quotas (attributable under the failed Agreement) were fully taken.

Most likely, it means that NEAFC is bending a little to regain control of the situation, though this may not be to the benefit of stock levels in the short and medium term if current catch levels represent over-fishing.

Given that the increase in the stock size and the attendant increase in the geographical spread of the stock may be due to increased water temperatures and availability of food, some new equilibrium level of SSB may emerge, so long as the ecosystem retains its new structure. However, such flourishing of fisheries has been seen before, only for the situation to return to a historic norm.

Such was the case with the Gadoid Outburst in the North Sea in the 1970s when the members of the cod family enjoyed far greater than average recruitments for a number of years before returning to previously observed levels.

Figure 3: The Recent Migration Pattern of Mackerel in the North East Atlantic



Source: Norwegian Fisheries Ministry.

In any case, if over-fishing develops or has already developed on the new stock size and location, even if the eco-system is capable of carrying a greater capacity of stock, then the stock will suffer a decline. As such, some flexible arrangement allowing the fishing industry to benefit in the short term while maintaining vigilance for the long term would be ideal.

Unfortunately stock assessment is two-years behind such developments and a prudent approach is desirable. An observed decline in the stock might indicate over-fishing or a return to the old carrying capacity. In either case the response must be reducing TACs to below currently sustainable levels until the SSB can recover.

4. THE IMPACT OF THE ENTRY INTO FORCE OF THE REFORMED COMMON FISHERIES POLICY ON THE MANAGEMENT OF SHARED FISH RESOURCES

KEY FINDINGS

- The reformed CFP will be consistent with the management plan for Norwegian Spring-Spawning Herring and Mackerel stocks in the North East Atlantic.
- Over-capitalisation is no longer a serious problem in the fleets of most EU Member States exploiting the North East Atlantic pelagic stocks because generally they operate some form of tradeable fishing concessions, a key feature of the reformed CFP.
- The slow decline in employment will continue unless there is a temporary re-adjustment as a consequence of the larger recently-experienced fish stocks. It is a consequence of technical creep in an industry whose output is constrained by the environmental carrying capacity of the oceans.
- The target of maximum sustainable yield is uncertain for the fish stocks. It is not known whether the current large stocks are a permanent or temporary phenomenon. A balance has therefore to be struck in exploiting the opportunity presented without risking the spawning stock, should the situation prove to be temporary.

4.1 The Five Strands of the Proposed Reform of the CFP

The Proposal of the European Commission to the European Council and the European Parliament for the reform of the CFP due in January 2014 has five strands:

- A Ban on Discards
- Regionalisation
- The Social Dimension of CFP Reform
- A Target of Maximum Sustainable Yield
- Transferable Fishing Concessions

4.1.1 The Ban on Discarding

The question of discards is not one of serious importance for the pelagic fisheries of the North East Atlantic because the nets used have traditionally allowed smaller fish to escape and the fish within the migrating stocks are relatively uniform in size. As such, the pelagic fisheries may be described a relatively “clean”.

The main problem of discards with the pelagic fisheries is not of discarding small or over-quota quantities of the target species, but of discards from by-catch. Occasionally there may be a problem related to other species being found feeding from the stocks, for example Saithe preying on Mackerel, or Mackerel mixed with Herring.

4.1.2 Regionalisation

Regionalisation is also something that is not of importance as far as management of the pelagic stocks of the North East Atlantic is concerned. The whole of the area may be viewed as a single area within which the stocks pursue their migrations.

This has been recognised by the European Commission in the structure of the Regional Advisory Councils (RACs) created under the current CFP. The pelagic species have been given their own RAC, indicating the differing management requirements that they have compared to demersal and shellfish fish stocks and whose RACs are more directly related to geographically defined fishing basins, the North Sea and Baltic Sea being examples.

Thus, the potential impact of the entry into force of the reformed CFP on the management of the fish resources of the North East Atlantic shared by the EU with the Coastal States of the Færoe Islands, Iceland and Norway mainly concerns the three remaining strands, and these are discussed in detail below.

4.1.3 The Social Dimension of CFP Reform

The social dimension of the CFP is essentially drawn up in its impact on employment. In its discussion documents the Commission recognised the problem of a decline in employment in fishing, compounded by the low attractiveness of fishing to new generations of fishermen. A further consideration is the decline in employment opportunities in coastal areas on the periphery of the EU that is involved.

The pelagic sector illustrates these difficulties well. The pelagic fleet is composed primarily of large and expensive vessels. The decline in employment in the pelagic sector is linked to two factors; technical advance and removal of distortions with the advent of fishing rights.

Technical advance means inevitably that in exploiting a resource which is of finite size the use of labour to produce output will be substituted by increasingly efficient machinery. One has only to consider the way farming has moved in the last 100 years to see the substitution of labour for capital equipment in an activity which is similarly constrained by the availability of land. The same must be expected of fishing and especially of fishing for the pelagic species because of their shoaling characteristic.

The gradual imposition of management systems which designate fishing rights is also important. Most of the major fleets pursuing the pelagic species have gone through the process of shaking out the distortions in capital investment that open access to fisheries creates. This normally takes the form of substantially reducing the number of vessels in a fleet needed to take a given level of harvest.

To counter-balance this, recovery of the fish stocks will provide growing fishing opportunities. Not all of these could at present be absorbed by capital investment so it is to be expected that, if stock levels can be restored to levels which provide the maximum sustainable yield or, better, the maximum social rent, then employment opportunities will improve. Given the changes in the behaviour of the Norwegian Spring-Spawning Herring and Mackerel in the North East Atlantic and the changes in environmental conditions underlying them it is difficult to know how close the stocks are to being able to provide maximum sustainable yield.

4.1.4 A Target of Maximum Sustainable Yield

Maximum Sustainable Yield will be a specific objective of the reformed CFP in line with the 1982 UN Convention on the Law of the Seas, reiterated most recently in the Nagoya Protocol (2010). The MSY is the maximum level of landings, allowing for discards, which could be obtained in perpetuity from a fish stock.

To achieve this, the fish stock must be at the level which permits the greatest amount of growth, and that growth, no more and no less, must constitute the yield; more would run down the stock, less would be a missed opportunity for social rent.

The management plan for the North East Atlantic Mackerel and Herring fisheries does not specifically mention MSY but the management plans seek ICES advice based on its judgement of the sizes of the fish stock in relation to MSY. As such, the management plans remain consistent with the CFP.

4.1.5 Transferable Fishing Concessions

The planned reform of the CFP is to include a requirement imposed on Member States that transferable fishing concessions are introduced as the primary means of allocating quota, subject to the proviso that marine resources must remain a public good and that the concessions will amount to a user right limited in time. Other constraints on sale include that only fishing vessel owners are to be able to purchase them.

The plans within the CFP represent an umbrella system within which Member States are free to establish their own particular systems subject to broad rules and principles. As such the reformed CFP would appear to remain consistent with the current management of the North East Atlantic Herring and Mackerel fisheries, cherry-picking the virtues of the differing existing systems of the participating Member States.

The reformed CFP should therefore present few difficulties for the continuance of the current Coastal States management agreement for these fish stocks.

5. ADVANTAGES OF EU FISHERIES CO-OPERATION WITH ICELAND AND NORWAY

KEY FINDINGS

- The principal advantage lies in ensuring that the maximum return can be obtained from the fishery as TACs adapt to existing conditions.
- By ensuring agreement, coastal communities dependent on the fishery can adapt at a more leisurely pace to the changes in employment opportunities and income.
- The management system will be stable, enabling nation states and their industries to plan their investment.
- Consumers will benefit from a regular and relatively abundant supply of a valuable protein food at affordable prices.
- Exports will benefit from the comparative advantage in trade created by an abundant resource.

5.1 Advantages and Reasoning

Modern thinking is that fisheries co-operation among states exploiting the same fishery is essential. It is no longer a matter of advantages and disadvantages, and it is well understood that attempts to gain a competitive advantage by autonomous action lead to all stakeholders losing.

Fishery economics has shown that participants in a fishery all suffer lower incomes if a fishery is left to open access[1] because the stock is fished down. This applies even if only a single participant operates significantly outside a common system designed to overcome the effects of the market failure that causes over-fishing. So, for example where all the states except one in a fishery auction the quota, the action of the one allocating a pool quota instead will mean that none of the states enjoy the benefits of the potential resource rent, i.e. the profit of good management to society.

Paradoxically, their fleets will still benefit from the efficiencies brought about by quota being given a market value; the Dutch beam trawl, British and Danish fleets are good examples of this. Where one vessel makes black landings all vessels in a fishery suffer a loss of income and profits to the extent that the illegal action depletes the fish stock.

[1] The meaning of the term ”Open Access” is “open to additions or withdrawals of capital input”. In other words, a fishery which has constraints such as a limited number of licences or limited days at sea remains open access because owners continue to be free to increase the capital input in their activity. Fisheries may always be regarded as open access so long as the constraints imposed fail to capture the economic value of the fish resource exploited.

This situation is exacerbated with highly migratory fish stocks such as the Herring and Mackerel of the North East Atlantic. It is perfectly possible for a fishery to become economically exhausted, or for a TAC to be taken before a stock arrives at later locations in the migration, leaving those locations at the end of the migration route disadvantaged.

5.1.1 An Example from History of the Problem of Migratory Stocks in the EU

We have a perfect example of the problem of migratory stocks for dependent communities in the European Union. One component of the North Sea Herring stock – the Downs Stock – would share the early part of the year in northern waters mixed with three other components of the North Sea stock. In the summer they would leave the Shetland & Orkney component behind and with the Buchan and Banks stocks begin their migration down the British east coast.

The Buchan and Banks stocks would be left to cross the North Sea eastwards towards Denmark while the Downs stock continued south to the Channel to spawn. In doing so they created the autumn East Anglian Herring fishery where Great Yarmouth had based its economy since the seventh century on their exploitation.

The advent of the steam drifter in 1897 saw the fishery expand rapidly and more than 250 000t of Herring were landed into Great Yarmouth and its near neighbour Lowestoft, some 12 km to the south, in 1913. From then the fishery declined as the fish stock was successively over-exploited both locally and more significantly in the context of this report, further north before the Herring reached the East Anglian coast.

The decline manifested itself in falling landings and revenue and falling numbers of vessels taking part in the fishery. Fewer crews were employed and the girls who processed the fish and came in large numbers from Scotland gradually lost their work.

The death knell for the fishery was the invention of the power block in the early 1960s, though in truth the fishery was already all but lost, and after 1968 no commercial landings of Herring into Great Yarmouth are recorded. Despite the recovery of the stock brought about by the 1978 to 1983 moratorium there is no Herring fishery there now.

This fragment of economic history makes the advantages of co-operating in fisheries management clear if local dependency is to be a consideration and more detailed discussion of them follows in the succeeding sections of this chapter.

5.1.2 Resource conservation

Only with agreement among all the states whose fleets harvest a fish stock, and so long as there is effective management enforced by all the states, can resource conservation be achieved.

This highlights the danger of the current position with states setting unilateral TACs which sum to a greater output than the stock is thought to be capable of withstanding in the long term. The situation is particularly risky with pelagic stocks because the shoaling characteristic means that as they are over-fished, the stocks contract in size maintaining the relative density of the fish stock and there is no obvious fall in catch rates until the stock is close to economic and physical exhaustion.

5.1.3 Protection of Coastal Communities

It is often held that fisheries provide relatively small contributions to the EU economy. Even in the UK which is the most important fishing nation in the EU, the contribution of fisheries including the on-shore sector through to the final consumer is less than 0.5% of GDP. Economies are made up of a myriad of activities which generally each provide only a tiny contribution to GDP and just at the moment there are several Member States which would be only too pleased to be able to add 0.5% to their GDP.

The European Commission comments that fisheries provide less than 0.2% of employment in the EU, but then highlights the uneven distribution of dependency. In Killybegs in Ireland 68% of jobs are fishery dependent, in Fraserburgh in Scotland some 33%. As it is in the nature of a limited resource faced by improving technology, employment has been falling in fisheries and will continue to do so. There are often few alternative sources of employment in the peripheral areas where fishing is based so that the viability of communities may be threatened.

As the result of sound management, stable fisheries offer at least a slow transition for such communities in the face of the inevitable general decline in employment. Of course, a return to high output from recovering fisheries may provide a boost to employment for years to come before the impact of technological creep sets in.

5.1.4 Capture of the Resource Rent

The resource rent of a fishery is the profit to society as a whole from engaging in a fishery compared to engaging in the next best alternative.

At present most of the fleets operating in this fishery do so under one type of system or another which offers transferability of quota. The significant exception is the Norwegian system which while offering individual quotas (and for many years imposing a discard ban) does not allow them to be traded between vessel owners or between vessel owners and others.

Generally these systems also have additional measures to control inputs and activity, such as minimum mesh sizes.

Smaller vessels (the precise definition varies among the Coastal States) are also excluded from the general quota systems and are either operating from a pool quota or face input controls, so-called “effort” measures, such as limits to time spent at sea.

5.1.5 Equitable Returns from a Shared Resource in a Community Spirit

It is often difficult to determine just how much of the resource rent is captured by these systems which frequently do not meet the theoretically postulated requirements to maximise it, but in practical terms if the resource appears to be exploited sustainably, and given the natural variability of the size of the fish stocks, it can be assumed that the management system is achieving close to the best possible.

Without co-operation between the Coastal States, gathering the resource rent to the benefit of society will be made more difficult if not impossible. But underlying this is the question of the share of the benefit which goes to the Coastal States; the very question of allocation of scarce resources, which underlies the difficulties presented in the management negotiations and which have led to their collapse.

If the resource rent is so obviously maximised (within the limits imposed by natural variability and human knowledge) by a TAC agreed and adhered to among the Coastal States, why then might the Færoese and Icelanders feel it sensible to declare unilateral quotas, which, when combined with those of the EU and Norway, threaten to reduce progressively the size of the fish stock and by implication their earning possibilities?

The immediate answer appears to lie in a coercive strategy, namely, if the EU and Norway do not allow the Færoe Islands and Iceland a greater share of the TACs then all the Coastal States will have to face the consequences of declining fish resources.

However, the argument works equally well in the opposite direction; if the Færoe Islands and Iceland are prepared to allocate themselves a greater share of the fish stock than they have had in the past then, again, all the Coastal States will share the consequences. Unless one or both sides give ground, only a pyrrhic victory could be achieved.

The situation is analogous to where workers go on strike only to achieve a wage increase which does not meet their loss of wages during the strike. This phenomenon has been widely studied and it has been suggested that, while it appears that workers lose, in fact, their company will be more amenable in future pay discussions in order to avoid further strikes and the loss of output and earnings that they incur.

If this line of thought is followed, then the Færoese and Icelanders may be prepared to forego short-term earnings, expecting the stocks to be capable of recovering, in order to obtain a greater share in future. This argument will only hold so long as the reduced Herring and Mackerel stocks do not retreat into Norwegian waters.

5.1.6 Stability of the Fishery

To some extent, trying to achieve stability in fisheries is chasing a Will o' the Wisp. There are many factors which mitigate against stability: the natural variability of the stock, economic influences, a changing eco-system, a changing environment, changing climates and many more.

However, slowing change to levels which can allow an orderly shift in investment and employment is socially important, and success in negotiations will usually facilitate this.

5.1.7 Multiplier Effects On-Shore

The benefits of co-operation extend beyond the fishery to the onshore sector. Thus employment, especially valuable in the peripheral areas of the EU, is created by activity at sea, upstream in the servicing and maintenance segments, and downstream in processing, distribution retailing and catering.

In general, somewhere in the order of three extra jobs is created in the EU economy for each job at sea as a result of the indirect employment created and the stimulus to other parts of the economy from their earnings. The benefit from effective management of the fishery arrived at through co-operation is that the number of these jobs is also maximised.

5.1.8 Consumer and Export Benefits

It follows that an abundant supply of fish will offer the consumer the opportunity to purchase a healthy protein food at reasonable prices – though multiple stores tend to make a significantly greater mark-up on Herring and Mackerel, selling at similar retail prices to products such as cod, haddock and hake, which fetch much higher prices at the quayside. Typically, after processing Herring and Mackerel are sold by retailers at 15 times or so their quayside price compared to three times the quayside price for cod, haddock and hake.

A relatively small proportion of the catch of Herring and Mackerel goes for consumption in the EU. The principal markets are China, the Russian Federation, former states of Eastern Europe and Nigeria.

5.1.9 Stability in the Management System

Perhaps the greatest achievement of the CFP, and one which seldom receives the accolade it deserves, has been the development of the principle of Relative Stability. This principle, which was devised by Commission staff, was not set out in EU Law, but has been accepted politically with little complaint and has served well the annual round of TAC negotiations within the CFP, removing the need for constant renegotiation of Member State allocations within the agreed global TACs. It works on the basis of allocating quota according to member states' percentage track record of catches in the three years preceding the agreement and maintaining that percentage as a constant determinant of allocation, hence the name Relative Stability.

This provides considerable benefits to the fishing industry in its planning, subject to overall changes in the TACs, and removes a potential continuing source of conflict. Occasional derogations, such as the Shetland Box and Hague Preferences, have the purpose of protecting communities highly dependent on fishing.

6. CHALLENGES IN EU FISHERIES CO-OPERATION WITH ICELAND AND NORWAY

KEY FINDINGS

- The Dispute has arisen among the Coastal States responsible for the management of Norwegian Spring-Spawning Herring and Mackerel in the North East Atlantic from the shifts in behaviour of the migrating and straddling pelagic stocks.
- Solutions to the problem depend upon finding a long-term system of allocating the TACs between the Coastal States and Distant Water Fishing Nations also present which recognises not only the changing sizes of the fish stocks but also their changing migration patterns.

In the North East Atlantic, the pelagic stocks including Herring and Mackerel stocks are highly migratory and their shoaling characteristic makes them especially vulnerable. The stocks migrate long distances through and between the Exclusive Economic Zones of the Coastal States where communities depend on them for employment and income. The area they occupy expands and contracts according to the numbers in the fish stock. They follow their food and will change their migration patterns if the need arises.

Dispute among the Coastal States arises from these shifts in behaviour because the fish spend differing amounts of time in the EEZs.

The Færoese are currently claiming that they are entitled to a greater share of the Mackerel TAC than the fixed percentage they have enjoyed in the past because the stocks are now spending more time in their EEZ and gaining more weight in Færoese waters than they have previously done. An explanation for the behavioural shift of the Mackerel has been that the Krill on which they feed have themselves moved to warmer waters as climate change has altered the location of suitable ocean temperatures.

If stability in the management of the fishery is to be achieved, the main challenge is to create a flexible Principle of Equitable Allocation similar to Relative Stability and building on its ideas but of a more sophisticated nature to cope with the peculiarities of the widely distributed and highly migratory fish stock resources of the North East Atlantic. This would remove annual wrangling over proportional allocations and reduce the discussion to considering a sustainable maximum level for the TAC.

6.1 Possible Solutions?

A number of possible solutions present themselves but the over-riding requirements are that they must be acceptable to the Coastal States and consistent with their management regimes. This is not to say that the Coastal States may not be prepared to change their management regimes in respect of the highly migratory and straddling fish stocks of the North East Atlantic.

6.1.1 The Status Quo: No Long-Term Solution

The Herring stocks of the North East Atlantic which exist mainly within the waters of a single coastal state will be prey to the national management measures, but those are likely to ensure sustainability. The Herring and Mackerel stocks which migrate between EEZs and into the high seas are at risk if no agreement can be found to enforce TACs which ensure sustainability and, if necessary, recovery.

If no solution can be found to the problem of determining the allocation of quota among the countries participating in the fishery in the long term, then all participants in the fishery will be caught by the now customary pattern of over-fishing, over-capitalisation, declining landings, and declining stocks.

6.1.2 Common Tradeable Rights

The difficulty with tradeable rights stems from the initial allocation of entitlements to fish. This is usually done on the basis of track record prior to the initial allocation and the allocations are thus proportionately unchanging between states. It is not difficult to institute a system which allowed for variable TACs – almost all tradeable rights systems around the world have succeeded in this – but it would be awkward to develop an agreed system which could accommodate spatial variations which are partly a function of stock size and partly a consequence of environmental changes. The only way this might be achieved would be to remove the distinction between the Coastal States' EEZs and allow fishing by any of the Coastal State and Distant Water fleet vessels anywhere within Area 27 so long as they possessed the fishing rights.

Coastal States are likely to find this a challenge to their sovereignty and their fishing industries are not likely to be pleased to see the allocations of fish for another state increased when their own have decreased simply because the fish stock have taken a different migratory course. Worse, such allocations could only be done on the basis of historic migratory patterns as the movements for the coming year, the year of the TAC, are unknown.

6.1.3 Auction Systems

Auction systems where quota is allocated each year on the basis of bids vary from most tradeable rights systems only in the initial allocation of the quota among the fleets. They preserve the ownership of rights in perpetuity with the state and have the political advantage of denying a windfall gain to those who happen to be in a fishery at the time tradeable rights are introduced.

6.1.4 Spatially Quantified Quota Division of the TAC

The Coastal States of the North East Atlantic and nations with a Distant Water interest have shown willingness in the past to conform to the requirements of the United Nations Fish Stocks Agreement of 1995 in establishing a common management regime and agreeing a share of TACs. It is the share of TACs element that has broken down in the cases of both Herring and Mackerel.

The underlying problem is the variable spatial distribution of the TAC. It would be possible to construct a system similar to that of Relative Stability operating in the CFP where a permanent quota key allowed for variations in the proportions of TAC allocated to each state according to the size of the fish stock, so that when the stock was estimated to be large, the Færoes and Iceland would receive a larger proportion of the TAC.

This might be justifiable on the grounds that with larger stocks more fish spend time feeding in their waters. If for some reason a stock were to contract and end its migration for a period, then the Færoese and Icelandic allocations would be reduced. This of course assumes consistent migration patterns which have not always been observed in the past.

7. CONCLUSIONS

KEY FINDINGS

- Dispute has arisen among the Coastal States responsible for the management of Norwegian Spring-Spawning Herring and Mackerel in the North East Atlantic from the shifts in behaviour of the migrating and straddling pelagic stocks.
- Solutions to the problem depend upon finding a long-term system of allocating the TACs between the Coastal States and Distant Water Fishing Nations also present which recognises not only the changing sizes of the fish stocks but also their changing migration patterns.

In recent years the stocks of Norwegian Spring-Spawning Herring have recovered from their collapsed sates of the 1970s but recent evidence suggests a decline has set in from the very high levels of stock experienced in the mid 2000s. The stock of Mackerel in the North East Atlantic has also shown a recovery from lower levels, though the stock had not been in a state of collapse.

In general the economic recession experienced in Western Europe in the last five years as a consequence of the banking crisis has not added to the pressures on the Coastal States to increase their fishing. However, the economic position of Iceland is the exception and may be adding to the pressures on the Icelandic government.

Nevertheless, the underlying problem which has caused the breakdown of the system for agreeing TACs and quotas is the increased size of the stocks. This may have been exacerbated by increased water temperatures in the case of the Mackerel. But these factors have brought about changes in the migration patterns of the fish stocks. Combined with uncertainty about the levels of the stocks, the abundances apparent to the fishing industry have inevitably led to pressures for higher TACs which have been accepted for 2014.

If a solution is to be found which provides a stable means of agreeing TACs and quotas among the Coastal States,it would appear to be necessary to find a means of allocating the quotas which is sufficiently inflexible as to not need to be re-negotiated each year, but is sufficiently flexible to take account of differing migration patterns of the fish stocks. The Principle of Relative Stability used for allocating quota under the CFP provides a simplified model that could be developed to include a spatial dimension for the North East Atlantic pelagic stocks.

REFERENCES

- Bjorndal T, Gordon D.V, Kaitala V, and Lindroos M, 2002, International Management Strategies for a Migratory Fish Stock: A Bio-Economic Simulation Model of the Norwegian Spring-Spawning Herring Fishery, Discussion Paper No 15/02, Centre for Fisheries Economics, Institute for Research in Economics and Business Administration, Bergen.

- European Commission, 2011, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the External Dimension of the Common Fisheries Policy, European Commission, Brussels, 13.7.2011, COM(2011) 424 final.

- European Commission, 2011, Proposal for a Regulation of the European Parliament and of the Council on the Common Fisheries Policy, European Commission, Brussels, 13.7.2011, COM(2011) 425 final, 2011/0195 (COD).

- European Commission 2013, CFP Reform – 5 Papers; The Social Dimension, Regionalisation, Maximum Sustainable Yield, The Discard Ban, Transferable Fishing Concessions, http://ec.europa.eu/fisheries/reform/proposals/index_en.htm, viewed 8 October 2013.

- European Parliament, 2008, Fisheries in Norway, Directorate-General for Internal Policies of the Union, Policy Department Structural and Cohesion Policies, European Parliament, IP/B/PECH/NT/2008_04, May 2008.

- European Parliament, 2012, Icelandic Fisheries, Directorate-General for Internal Policies, Policy Department B: Structural and Cohesion Policies, European Parliament, IP/B/PECH/NT/2012-06, March 2012.

- European Parliament, 2012, Right Based Fisheries Management in Iceland and Economic and Financial Crisis, Directorate-General for Internal Policies, Policy Department B: Structural and Cohesion Policies, European Parliament, IP/B/PECH/IC/2011_130, March 2012.

- European Union, 1992 Socio-Economic Report 1992, Directorate-General for Fisheries DGXIV, Brussels.

- Fishing News, 2013, Has the EU reached Mackerel deal with Iceland? Intrafish, London, 3 November 2013.

- Hafro, 2013, Herring: Clupea harengas, Nytjastofnar sjavar 2012/2013 – aflahorfur 2013/2014, http://www.hafro.is/astal/2013/english/24-Mackerel-13.pd, viewed 1 October 2013.

- Hafro, 2013, Mackerel: Scomber scombus, Nytjastofnar sjavar 2012/2013 – aflahorfur 2013/2014, http://www.hafro.is/astal/2013/english/21-Herring-13.pd, viewed 1 October 2013.

- ICES, 2012, Report of the Working Group on Widely Distributed Stocks (WGWIDE), 21 - 27 August 2012, Lowestoft, United Kingdom. ICES CM 2012/ACOM:15.

- ICES, 2013, NEAFC request to ICES to evaluate possible modifications of the long-term management arrangement for the Norwegian spring-spawing Herring stock, ICES Advice Book 9: Widely Distributed and Migratory Stocks, Special request, Advice May 2013.

- ICES, 2013, Mackerel in the Northeast Atlantic (combined Southern, Western, and North Sea spawning components): Advice for 2014, ICES Advice Book 9, October 2013.

- Ministry of Industries and Innovation, 2013, Iceland's Commitment to Sustainable Mackerel Fishing, http://eng.atvinnuvegaraduneyti.is/subjects/Mackerel-fishing-dispute/nr/6902, viewed 24th October 2013.

- North East Atlantic Fisheries Commission 2013, Various documents including amendments to the 1982 agreement, www.neafc.org/basictexts, viewed 5 October 2013.

- Norwegian Ministry of Fisheries, 2013, Norwegian Spring-spawning Herring (Claupea harengus L.), http://www.fisheries.no/ecosystems-and-stocks/marine_stocks /norwegian-spring-spawning-Herring/, viewed 8 October 2013.

- Rodgers P.E. et al, 2008, Marketing and Price Formation of Fisheries and Aquaculture Products, Report for the European Parliament Committee on Fisheries, No. IP/B/PECH/IC/2007-039.

- SeaFish, 2013, Mackerel, Industry Briefing Note, Sea Fish Industry Authority, Edinburgh, January 2013.

- Undercurrentnews, 2013, Norway bans Faroese Herring landings, 8:05am 26 August 2013, http://www.undercurrentnews.com/2013/08/26/norway-imposes-ban-on-faroese-Herring-landings/, viewed 8 October 2013.

- United Nations Organisation, 1982, United Nations Convention on the Law of the Sea of 10 December 1982, http://www.un.org/depts/los/convention_agreements/texts/unclos/ unclos_e.pdf, viewed 1 October 2013.

- Vinnslustödin hf, 2013, Herring, Iceland, www.vsv.is, viewed 15 October 2013.

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