# Red Herrings

## A Simulation Exercise on Fisheries Decision Making

# Introduction

This is a simulation exercise, in which you will take the role of one of three interest groups concerned with fishing in the North Sea – regulators, scientists and fishers. The task is for regulators to decide what to do about cod quotas in the North Sea. Quotas, allocated by EU regulators, are maximum amounts of fish which a fishing fleet is allowed to catch each year. Should quotas remain the same? Should they be increased to allow fishermen to make a living? Or should a total ban of North Sea cod fishing be put in place?

# What you will Do

**All: Read though the Context - see below (up to 15 minutes)**

**Fishermen and Scientists will be given up to 20 minutes to work out their case for retention of quotas or total ban, while regulators study further the context and its complexities. (20 minutes)**

**Regulators will then ask the scientists and fishermen to present their cases (10 minutes)**

**Fishermen and scientists will then be given time to ask questions of each other and the regulators.**

**Regulators will be given 10 minutes to arrive at a public decision which should be justified to the scientists and fishermen.**

**Scientists, fishermen and regulators give their reactions.**

# The Context:

Recent apocalyptic scientific predictions have predicted that all commercial fish and seafood species could collapse by the middle of this century if present trends continue

In the EU the North Sea's fish stocks are particularly at risk. Spawning stock of North Sea cod has declined by over 80% since the early 1970s, and that the North Sea's total fish stocks have dropped from 26 to ten million tonnes in a century.

During the 1970s and '80s boom in North Sea fish catches, about 60% of the entire biomass of cod and haddock was removed annually. But landings of demersal species (like cod and haddock) have declined steadily over 25 years, and stocks are now thought well below the maximum sustainable yield; that is the largest average catch that can be taken continuously from a stock under average environmental conditions. Sustainable management is crucial because as fisheries are an extractive resource fishing practices like trawling may harm marine environments where the fish are found.

The North Sea is one of the major battle grounds for Europe's fishermen over fish stocks. The North Sea codfish has more often than not been at the centre of disputes because although it is a shared, 'fugitive' resource that does not respect political boundaries it also constitutes an important national and cultural emblem for some EU Member States, as well as being economically significant.

Although EU fishing makes only a small contribution to national incomes, total catch value in the North Sea exceeds €1,500,000 and its fishing industries directly employ around 138,000 people. Across Europe many fishing communities are dependent upon fishing as their staple industry

Fisheries are one of only five areas where the European Union holds absolute or 'exclusive competency', and ultimately exercises centralised control through the Common Fisheries Policy (CFP).

The CFP's essential objective is to ensure stock exploitation in such a way that "future exploitation of the stock will not be prejudiced and that it does not have a negative impact on the marine ecosystem".

This resource conservation and management system is designed to "protect and conserve available resources and accessible living marine aquatic resources" and also provide for "rational exploitation" as part of sustainable development. So as well as protecting the marine environment, the CFP should also ensure a fair standard of living for the fishing community.

The main way that the CFP attempts to legislate for the SD of its fisheries is through a quota system that delimits the maximum amount of fish that can be legally landed within a specific time period. The sum of all the quotas allocated in the EU, the total allowable catch (TAC), is decided annually for different stocks and then allocated to different Member States.

# The Scenario: **The scientists who advise the European Union on fish quotas have released a report calling for a total ban on cod fishing in the North Sea. Fishers oppose this ban.**

**EU decision makers, including officials who act as regulators, must decide what to do after listening to reports from both scientists and EU Fishermen!**

**Who are these scientists and why do they want a ban on cod fishing?**

They belong to ICES (International Council for the Exploration of the Sea) which is the organisation that coordinates and promotes scientific investigation in the North Atlantic.

ICES scientists from 19 member countries conduct their research through more than 100 working groups, and they are the main source of technical advice for the EU when it comes to deciding fish quotas.

**Does the EU always act on their advice?**

No. A complete halt to cod fishing in the North Sea has been recommended every year since 2001, but each time European fisheries ministers have rejected the advice after pressures from their own member state fishing industry and/or other interest groups.
Quotas have ranged from 49,000 tonnes in 2001 to 23,000 tonnes in 2006.

"Unreported fishing" also exists - where cod are discarded (i.e. thrown back into the sea, even if dead) either because they are too small to be landed legally or the quota has already been fulfilled.

ICES has a strong voice, but the EU only reaches decisions after prolonged discussions - and political considerations usually play a major role.

Dr Tom Pickerell, fisheries policy officer with environmental charity WWF-UK, said that when ministers would follow the scientific advice they were given remained an open question. Last year, EU fishing ministers clinched a deal on further fishing quotas which were enough to avoid the imminent collapse of cod stocks. But they refused to sanction the total ban on cod fishing in the North Sea, Irish Sea and west of Scotland which ICES had urged for the second year running.

**How real is the threat to fish stocks?**

Scientists say that we simply cannot carry on fishing in British waters at the level that we are doing at present.

They say despite attempts at reducing fishing quotas, and a decommissioning programme to reduce the number of fishing boats, cod stocks are still declining, and are now at such low levels that only a complete ban will save them from total collapse.

Furthermore, according to ICES, there is still no clear sign that cod stocks in the North Sea, Irish Sea and west of Scotland are making a recovery. Cod stocks in the North Sea alone total about 46,000 tonnes - less than a third of the recommended minimum of 150,000 tonnes.

However, fishermen say they are still finding and catching plenty of fish, and the scientists are being over-pessimistic. If there were so few cod, say some campaigners, fishing vessels would not continue to see cod caught by mistake in their catch, taking them above quota. Indeed, some campaigners for fishermen say there are signs that cod populations may actually be increasing.

But several scientists think this could be partly due to "hyper-aggregation" - the tendency of a hunted population to crowd together for safety, providing easy targets for the crews.

**Are there any precedents for a fishing ban?**

In 1992, the Canadian Government imposed a total cod fishing ban off Newfoundland. Its once vast, rich stocks of cod had been sent into freefall when industrial fishing methods took over from the smaller scale practices that had gone before.

The economic consequences of the ban were huge. The population in fishing areas reduced dramatically as people moved in search of other work. Property values plummeted as people trying to migrate out of the region attempted to sell their houses. Some fishing has continued, as shellfish moved in to take the place of the cod. But fish stocks have still not recovered.

**Are there alternatives to a ban?**

The scientists say no - the fishing effort on stocks is still too high and under-reporting of cod catches makes it difficult to get a true picture of stocks. However, fishermen argue that scientists do not work closely enough with fishermen and don't fully understand the real state of stocks. They argue that cod stocks are robust enough to deal with a continued catch.

**What will be the impact on fishermen?**

Jobs have already been lost and boats scrapped as a result of fish quota reductions, say fishermen. Some fear that whole communities could be destroyed if the current situation continues.

Campaigners warn that fishermen could be forced into militant action if the British fleet gets cut again.