

NORWEGIAN COLLEGE OF FISHERIES SCIENCE

The Problem of Sharing a Common Stock:

An Analysis of the Mackerel Conflict in the North East Atlantic



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Acknowledgments

This master's thesis represents the end of a journey that started in Stellenbosch sometime in the second half of 2006 during a seminar on development assistance in the fisheries sector in African countries. The many and interesting introductions by knowledgeable fishery researchers from Norway and other countries opened my eyes for an area which included many of my long-standing interests: the management of natural resources, biology and ecology, distribution issues, and international co-operation and conflict. In 2007 I contacted the Norwegian College of Fishery Science (NCFS) and asked if they would admit someone who would be both a distance learner (I was based in Pretoria at that time) and a part-time student. The answer I got was a resounding "yes". My most sincere thanks go to all the academic and administrative staff I have met (or emailed) at the NCFS during four years of studies. Without your forthcoming and friendly responses to my sometimes unconventional requests I would not have made it. Besides, the interaction I've had with NCFS staff has been characterized by something that I consider essential in life: to learn new things and have fun while doing it!

Oslo, 13 May 2011. Bjørnar Dahl Hotvedt

Abstract

This study examines the reasons why the European Union (EU), Norway, Iceland and the Faroe Islands have been unable to reach an agreement for the distribution of the Total Allowable Catch for Atlantic mackerel. Whereas the allocation previously was decided by the long-standing coastal states, the EU, Norway and the Faroe Islands, changes in the mackerel's migration pattern in a northward direction has led to Icelandic and Faroese requests for a larger portion of the resource. The "mackerel conflict" breaks out in 2010 and entails the use of sanctions as well as the setting of unilateral quotas in addition to those following from the coastal state agreement. The combined quota demands far exceed sustainable harvesting levels and will by all likelihood lead to overexploitation. The research methods were qualitative and involved the application of two-level game theory and the consideration of "win-sets" to explain the absence of co-operative management. The main finding was that the pelagic fishers effectively enjoy veto power over the outcome of the negotiations, in particular in fishery-dependent Iceland and the Faroe Islands, but to a large extent in Norway as well. Also in the EU the affected fishers have a decisive influence, although only in political terms. The parties' many attempts at influencing each other's positions have so far had no discernable effects and the situation begins to bear resemblance to a "tragedy of the commons".

Key words: Atlantic mackerel, European Union, Norway, Iceland, Faroe Islands, TAC, quotas, conflict, two-level games, tragedy of the commons.

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1.0 INTRODUCTION

Commercially important fish stocks crossing political borders in the ocean have many times led to serious conflicts between nations. In an ideal world all stocks (and all other marine resources for that sake) would be located within each nation state's 200 nautical mile Exclusive Economic Zone (EEZ). If this was always the case, the stocks would be an entirely domestic issue and their management would be left to national authorities alone.

In the real world however, the migratory range of fish stocks do not necessarily coincide with the jurisdictional boundaries of states, and stocks which move in and out of two or more states' EEZ, and sometimes in and out of international waters as well, are quite common. In fact, many of the commercially interesting stocks of the North Atlantic, including the North Sea, the Norwegian Sea and the Barents Sea, are as described above and therefore often referred to as *straddling stocks*¹. Examples of such stocks are Barents Sea cod, Norwegian spring spawning herring, and North East Atlantic mackerel, which is the species of interest of this thesis.

In the period from the 1950s to the 1970s the *cod wars* between Great Britain and Iceland clearly demonstrated how high the stakes can be with respect to a valuable natural resource. One of the most serious moments of the conflict happened in 1972 when Iceland unilaterally extended its economic zone to 50 nautical miles. The ensuing confrontation with Great Britain involved the use of coast guard and military vessels, cutting of nets, ramming of fishing boats as well as legal confrontations in the International Court of Justice. In 1994 a Norwegian coast guard vessel opened fire with a non-armed grenade on an Icelandic trawler in the so-called "Loop Hole", an area of international water in the Norwegian Sea. Again the issue of contention was fishing rights for cod.

These examples show how disagreement over access to valuable natural resources can result in serious political conflicts that have the potential to influence bilateral

¹ These stocks are are sometimes called *transboundary stocks*.

relations negatively for a long time. In essence, these distributional conflicts occur when a better bargain for one party leads to another party or parties getting less (Asgeirsdottir 2008:10). Even though fish is a renewable resource, it is beyond doubt that a large fishing pressure on a given stock over time will result in less fish. The consequence is the familiar situation of overexploitation, where too many fishers chase too few fish. So, in a setting where two or more states have fishing rights or access to a given stock, their basic incentive will often be to aim for the largest possible portion of the resource. If the behavior of modern states was entirely de-coupled from international conventions and agreements and concerns for the environment, the endresult would inevitably be an utterly depleted fish stock. The presences of constraints as the ones mentioned above normally help states avoid depletion. That said, there are today numerous examples of overexploited fish stocks, some even at the brink of extirpation, both in Europe and other parts of the world.

1.1 Problem definition, research question and objective

The species of interest of this thesis is the Atlantic mackerel. Although it for decades has been an important commercial species for many European coastal states, it has not been the subject of many heated conflicts, at least not in North Europe. This was to change in 2010. Although the gradual escalation of the conflict was well know to fishery scientists and national fishery officials in the years prior to this, it was not until 2010 that the average newspaper reader was made acquainted with a new fishery conflict labeled "the mackerel war²". In contrast to the (usually) bilateral conflicts of earlier controversies over fishing rights and quotas, the new conflict seemed even more complicated as it involves four different players: the European Union, Norway, Iceland and the Faroe Islands.

A further escalation of the conflict happened on 29 July 2010, when Norway introduced a ban of mackerel landings by Icelandic and Faroese vessels. It has

² See for instance The Independent on 11 August 2010: "Now Britain and Iceland go to war over the mackerel". According to the article the mackerel war appears to be an echo of the 1970s cod war when British gunboats were sent to ward of Icelandic trawlers in disputed waters.

emerged that the European Union has considered taking the same or even tougher measures³.

The mackerel conflict refers to the disagreement between the European Union and Norway on one hand, and Iceland and the Faroese Islands⁴ on the other, with respect to the distribution of the Total Allowable Catch (TAC) of North East Atlantic mackerel. The background for the conflict is the new migration pattern of parts of the mackerel stock whereby an increasingly large portion of it dwells in Icelandic and Faroese waters at certain times of the year. This trend has been particularly evident from 2008. In both Iceland and the Faroe Islands the presence of substantial amounts of mackerel is viewed as an important income opportunity and the two countries' pelagic fleets have increased their catches to a significant degree. It follows from this that the two parties are demanding a larger share of the TAC.

The European Union and Norway for their part, claim that Iceland and the Faroe Islands do not have the right to exploit these resources since their history of nonparticipation in the fishery does not give them equal fishing rights. The four parties have had numerous meetings with the aim of resolving the dispute and agree on a distribution of the TAC that all parties can accept, so far with little success. As a response to the refusal of the European Union and Norway to grant higher quotas to Iceland and the Faroe Island, the two latter have set unilateral mackerel quotas since 2010. In retaliation, Norway has banned landings of mackerel from Icelandic and Faroese vessels, and the EU has been threatening to do the same.

Based on the above outline my main research question is as follows: Why are the European Union, Norway, Iceland and the Faroe Islands unable to agree on a distribution of mackerel that is acceptable to all parties?

³ BBC News (Internet) 14 January 2011: "EU signals mackerel ban for Iceland ahead of more talks".

⁴ The Faroese Islands have the status as constituent country of the Kingdom Denmark but outside the EU. Several areas of competence are the responsibility of Denmark, but in fisheries matters the Faroe Islands enjoy complete autonomy.

In my view the matter at hand is to a large degree a "classical conflict" on the distribution of a natural resource. What makes it additionally interesting is the fact that all involved states subscribe to sustainable management principles and that there is a great degree of consensus as to the size of the resource thanks to extensive scientific surveys conducted by the International Council for the Exploration of the Sea (ICES). In other words: even though the parties by and large know how much fish there is out there, and even though they are well familiar with the possible implications of overfishing, *they do still not seem to agree*.

The objective of this thesis is therefore to explain the absence of an agreement and arrive at some conclusions as to which factors that appear to influence the parties' positions and priorities when they meet in international negotiations on mackerel.

1.2 Methodology and structure of thesis

Two important considerations influence the choice of method in scientific work: the objective and the problem definition (research question). Scholars often distinguish between two main types of methods: qualitative and quantitative methods. In general terms the major difference between qualitative- and quantitative methods is that the former transforms data to values and numbers, for instance in the form of statistical data, whereas the latter has a greater focus on the researcher's understanding and interpretation of meaning and social processes⁵. Qualitative data are thus data in the form of words from observations, interviews and documents, and it is important for the researcher to acknowledge that the words we study in our analysis are influenced by ourselves (Ruona 2005:2-3).

The method used in this thesis belongs to the qualitative category. In particular I have made use of document analysis, interviews and questions sent by e-mail. With regard to documents I have studied literature in scientific books, reports and articles, newspaper articles, and official reports and memoranda from the national fisheries authorities. Some of the documents that would have been very relevant to this study,

⁵ It should be noted that also in quantitative methods the conclusions ultimately rely on the researcher's interpretation of his results.

such as the delegations' internal protocols after each round of negotiations, are exempt from the public domain and therefore not available to students. However, interviews and questions sent by e-mail have been important additional sources of information.

There are both negative sides and positive sides related to the two abovementioned methods. The major strength of qualitative research is that it focuses on the processes that lead to outcomes, which are normally not identified in quantitative research (Maxwell 2005). Another perceived strength of the qualitative method is its flexibility of adjustment: one may change the structure of the analysis through the carrying out of the examination. The flexibility can also be a weakness as it may result in difficulty of collecting data of relevance. The quantitative method on the other hand, deals with these weaknesses by using standardized project descriptions. A common feature of qualitative methods is that they look at the distinctive character of a specific problem. This may leave little room for generalizations, but it renders good possibilities for making informed interpretations.

In summary, the choice of problem of this thesis – understanding how four autonomous parties act and define their own positions in the context of international negotiations – is to a large degree a social process. To opt for a qualitative approach therefore seems justified.

The structure of the thesis is as follows:

Given that the species of interest is mackerel, it seems fair to make a short introduction to its main characteristics, distribution, end use and economic value. Such an introduction will be made in chapter two. In chapter three the theoretical framework will be introduced. The underlying problem, the absence of co-operation on a shared natural resource is related to "the tragedy of the commons", so a presentation of Hardin's work from 1968 is warranted. A central part of this chapter will be dedicated to Robert Putnam's (1988) two-level games model for international negotiations, and I will describe how I will apply his theoretical approach to my research question.

In chapter four I will elaborate on the management of mackerel prior to the conflict and describe the sequence of events that led to it. In chapter five I will present the findings obtained from the application of procedures stated in chapter three. The main

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focus will be on the information collected and assessed during my analysis of the negotiations process, and how and to what extent the various groups in the parties' domestic arenas influence priorities and positions.

In chapter six I will discuss the findings in more detail and assess whether the twolevel model gives a satisfactory basis for answering my research question. In the discussions I also intend to draw on the lessons provided by Hardin's the tragedy of the commons. In the last part of the chapter I will discuss some future scenarios and possible solutions with respect to the mackerel conflict. Chapter seven is the concluding chapter.

2.0 INTRODUCTION TO THE ATLANTIC MACKEREL⁶

The Atlantic mackerel is a streamlined and fast-swimming pelagic fish. It prefers temperate and cold waters and its main distribution areas are in the Northwest and North East Atlantic. It can also be found in the Mediterranean, the Black Sea and the Western Baltic Sea although the fisheries in these areas are of less importance.

Little or no exchange seems to exist between the two North Atlantic distribution areas. The area of interest in this paper is the North East Atlantic, where fishery scientists break down the stock in three parts: a southern stock, a western stock, and a North Sea stock. The southern stock is found off the Iberian Peninsula and in the Bay of Biscay, with components as far south as the North African coast. The western stock is located west of the British Isles, and the North Sea stock resides in the North Sea.

The map below shows the main distribution of North East Atlantic mackerel. The orange (dark) areas represent the spawning areas whereas the blue areas indicate the distribution in general. The location of the stocks depends on migration patterns which in turn depend on food availability, spawning habits and other factors.



Figure 1: Main area of distribution of North East Atlantic Mackerel (source: IMR).

⁶ In this chapter I have in particular benefitted from knowledge and results published by the International Council for the Exploration of the Sea (ICES) and the Norwegian Institute of Marine Research (IMR).

Although it is to a certain extent possible to speak of distinctive stocks, or *spawning components*, the three stocks are normally treated as one single stock for assessment and management purposes. The reason for this is that there is a great deal of contact and exchange between them, in particular the Southern and Western stocks. It is only the North Sea mackerel that is sufficiently distinct to be clearly identified as a separate spawning component. Still, during the second half of the year mackerel from the Southern and Western areas migrate to feed in the Norwegian and the North Sea and then they also mix with the North Sea component.

The species undertake long migrations to its feeding grounds, in particular in summer and autumn, and it can form shoals of substantial size. Mackerel is a typically pelagic species though sometimes occurring near the bottom. It is mainly caught during spring, summer and autumn in continental shelf areas and along the shelf edge in waters of 15-200 meters in depth. In the summer it may move into inshore waters where it is often an easy prey for recreational fishers. In the cold months mackerel stay at deep water.

Mackerel grow to a maximum length of 60 cm although fish longer than 50 cm is uncommon. The mean length is about 30-35 cm. The species continues to grow throughout its lifespan but the annual increase is small after app. 2 years of age. It feeds on a variety of pelagic crustaceans as well as various small fish such as herring, sprat, sandeel and Norway pout. Feeding patterns vary seasonally and spatially.

Mackerel is an oily fish, building up energy reserves during spring and summer which it needs both for migration and subsequent gonad development during the following winter. It stops feeding almost completely during winter. The species is an important forage species for predatory fish such as tunas⁷ but also for many dolphins, whales, seals, and seabirds. It thus plays an important role in the North Atlantic food web.

Spawning occurs during spring and summer and progresses from south to north as the surface waters warm and fish migrate: the southern component spawns between February and June, whereas North Sea mackerel spawns between May and July.

⁷ The Norwegian word for bluefin tuna, *makrellstørje*, is a direct reference to the mackerel's role as an important forage species for its much larger cousin.

2.1 Catches, end use and economic importance

Prior to the end of the 1960s, the mackerel fishery only amounted to a small percentage of the herring landings in the North East Atlantic. Due to the considerable technological advance in the 1960s, catches of mackerel soon began to increase. In 1964 200,000 tons were landed and in 1967 a peak of over 1 million tons was reached. The high exploitation rate was the likely cause for the drop in landings in 1970 and the following years. Since the mid-1970s annual catches have been in the range of 500,000 to slightly more than 800,000 tons annually, as seen in the figure below.



Figure 2: Annual landings of North East Atlantic mackerel 1972-2009. Source: ICES. The high catches in the years 1993-94 led to concerns about excessive harvesting and stricter regulations were introduced. Since 2006 annual catches have again increased rapidly.

Mackerel is today captured in a variety of ways, the most important ones being purse seine, pelagic trawling and hand line. The mackerel fishing fleet is primarily located in Norway, Iceland, the Faroe Islands and the EU. The EU fleet mainly consists of vessels from Great Britain, Ireland, Denmark, France and Spain.

Traditionally most of the purse seine catches were used for reduction purposes but from the mid-1980s the market for mackerel products used for direct human consumption started to expand, including in overseas markets. Mackerel is today traded in a variety of ways: fresh, frozen, smoked and canned. In the autumn mackerel can contain as much as 30% fat and a substantial amount of fatty acids. The fish is a good source for vitamins D and $B12^8$.

Although the end use of the fish varies from country to country, the following figures from the Norwegian Seafood Export Council probably gives a fair impression of the utilization of North East Atlantic mackerel: in 2009 93% of the exported Norwegian mackerel was frozen round fish and 3% was frozen fillets. Fresh mackerel thus only represented 4% of the exports. The most important markets were Japan, China, Russia, Turkey, Nigeria and the Netherlands, and the value of the exports in 2010 was 3 billion NOK⁹. Exports of mackerel from Norway have never before reached such values.

According to the European Commission mackerel catches represented 6% of all EU capture fisheries in 2007 (in volume) making it the fourth most important species caught that year¹⁰. However, for the member states Great Britain and Ireland, the mackerel was by far the most important species. In some EU regions the mackerel is essential to the local fishing fleet. One such region is Scotland where the mackerel in 2010 was the most valuable species representing a value of £109 million¹¹.

For Iceland the fishery sector is of pivotal importance as it represents approximately 8% of the country's GDP and 40% of its export earnings. Even though mackerel has not traditionally been an important species, this has changed in recent years as there has been a huge influx of mackerel into Icelandic waters which in turn has been targeted by the country's pelagic fleet. This has resulted in a significant increase in landings and exports, mainly to Russia, East Asian countries and the United States. It is estimated that Icelandic exports of mackerel in 2010 represented a value of 49 million Euro¹².

Much of the North East Atlantic mackerel is exported overseas, but the fact that there are currently ten mackerel fisheries in the Fishery Certification Program of the Marine

⁸ Tryggmat.no: "Trygg behandling av sjømat" ("Safe Treatment of Seafood" – my translation). Web article.

⁹ Norwegian Seafood Export Council 12 January 2011: "Mackerel boosts pelagic sector". Web article.

¹⁰ European Commission (2010): "Facts and figures of the Common Fisheries Policy".

¹¹ The Fish Site: "Mackerel Prices in 2010", 17 March 2011. Web article.

¹² Fishupdate.com on 25 January 2011: "Iceland finds willing markets for its mackerel". Web article.

Stewardship Council (MSC), a major player in the seafood certification sector, indicates that mackerel is also a popular fish with many European consumers¹³.

Profitability in the mackerel fisheries depends on the market price which in turn fluctuates according to market conditions, availability of fish and consumer preferences. As mackerel is targeted only at certain times of the year the fishing vessels of this fishery will normally catch other species outside the mackerel season, typically other pelagic species. The profitability of the "mackerel industry" will therefore normally be viewed as a part of the profitability of the pelagic fisheries.

¹³Marine Stewardship Council on 16 July 2010: "Increased mackerel TACs in NE Atlantic and their effect on MSC certified fisheries". Web article.

3.0 THEORETICAL FRAMEWORK

The problem definition of this thesis is how we can explain the absence of an agreement for the mackerel fishery in terms of the priorities and positions of the four involved parties. To analyze this question I will use theories from the field of political science. The rational choice perspective of the well known "tragedy of the commons" (Hardin 1968) will be used to elucidate why there is a need for collective action to manage a natural resource like the mackerel. Thereafter I will employ the so-called two-level games in international negotiations (Putnam 1988) to examine the parties' priorities and positions and attempt to make informed conclusions with respect to my research question.

3.1 How theory can guide us

If our ambition is to conduct scientific research, a central objective should be to expand our understanding of the phenomena we are focusing on. In doing this we depend on theories and the development of theories. A scientific theory comprises a collection of concepts including abstractions of observable phenomena expressed as quantifiable properties, together with rules (called scientific laws) that express relationships between observations of such concepts¹⁴. A somewhat less rigid definition refers to theories as concepts which may be used to shed light on a real situation or phenomenon in society.

Even though they may be very different in structure and content, all theories share the common trait of being abstracts of concrete phenomena. Theories can be both simple and complex, and while some are rigid in their form and application others are more flexible and open-ended.

Instead of theory we sometimes speak of theoretical frameworks. A theoretical framework refers to a collection of interrelated concepts like a theory, but not necessarily so well worked-out (Borgatti 1999). It guides our research, determining

¹⁴ Wikipedia: "Scientific theory". Web article accessed on 1 May 2011.

which things you will measure, and what relationships you will look for. Typically, a theoretical framework defines the type of variables that you will want to look at.

In this sense, the selection of a theoretical framework is both a clarifying and exclusionary step in the research process¹⁵. While it sharpens focus and consequently increases clarity brought to the problem area, it excludes from the view of the inquirer other perspectives that might be brought to bear on the problem, but does so in explicit recognition of those perspectives and the rationale for their rejection.

3.2 The tragedy of the commons in fisheries

The tragedy of the commons was described in a famous article by biologist Garret Hardin in 1968. Ever since its publication the article has had a tremendous influence on studies on the utilization of scarce natural resources.

Hardin's analysis focuses on a pasture that herders use in common for grazing their cattle. There are no problems with the common usage of the pasture until the number of animals reaches the carrying capacity of the pasture. In order to gain extra profits, herders add additional animals to the common pasture. The problem is that each additional animal means more grazing in the pasture, and the continual addition of animals eventually leads to overgrazing. The end result is the destruction of the pasture. In the words of Hardin (1968:4): "Each man is locked into a system that compels him to increase his herd without limit – in a world that is limited".

He used the expression as a metaphor for the problems of overuse and degradation of natural resources including the overexploitation of fish resources, the overharvesting of timber, and the degradation of water resources. The word tragedy refers to the depletion of the common natural resource, and the commons stands for common ownership, hence the absence of private ownership and property rights.

¹⁵ This paragraph draws extensively on Cline, Daniel: "Logical Structure, Theoretical Framework". Web article accessed on 2 May 2011.

Fisheries are similar to Hardin's pasture in that increased fishing pressure has caused certain stocks of fish to become overfished to a point that threatens the survival of the fishery. In many fisheries all the conditions described by Hardin are met: an unrestricted number of users, unconstrained by any limits on their access, extract an increasing share of a resource until the resource is severely depleted. Fishers tend to have little incentive to practice conservation because they know that if they do not catch the available fish, someone else probably will.

The main line of reasoning of Hardin is that humans are egoistically calculating actors who will bring a common resource to extinction if they are not subjected to social arrangements which imply coercion of some sort. He argues that one must accept controls on individual freedom or we will all suffer the tragedy of the commons as a result of population increase. He recommends that the only kind of coercion is a form of coercion mutually agreed upon by the majority of the people affected.

Hardin's article has inspired numerous studies of overharvesting and destruction of natural resources, and his proposal to introduce controls on individual freedom has influenced scholars who analyze the development and effectiveness of international regimes.

Another and related way of looking at the tragedy of the commons, is to study it as a collective action problem. A collective action problem refers to the incapacity of individuals to solve on their own a problem which requires co-operation for an optimal result (Ostrom 2003). Without co-operation they actors may well act rationally on an individual level, but the sum of these actions leads to an outcome that does not serve the interests of the group as a whole. In other words: individual rationality leads to collective irrationality.

The research on collective action problems has often focused on the overexploitation of public goods, i.e. goods where one individual's use of a good does not exclude other individuals from using the same good. Examples of such goods may be "clean air" or "absence of extreme weather due to measures mitigating climate change". In addition scholars have analyzed the problem of free riders: individuals who attempt to benefit

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from a public good without paying for it (Anderson 2004:59). With regard to fisheries this occurs when a participant in a given fishery shows no constraints himself but simply wishes to benefit from the preservation efforts of others.

A natural resource like the mackerel is not a public good in the traditional sense. Nevertheless, fish is difficult to exclude people from using as it in principle is no man's property (Hoel and Kvalvik 2005:347). As a renewable resource, its use tends to be of a rival nature – one person's use of it has consequences for others. These two characteristics, non-excludability of users and rivalness of consumption, make fish a so-called *common pool good*. Such goods are susceptible to a tragedy of the commons if their use is not properly managed (ibid).

In the political science literature Hardin's work is regarded as an example of rational choice perspective to human behavior. The extreme form of this line of thinking is that users will invariably bring unregulated common natural resources to extinction. In contrast we have the co-operative action theorists, who claim that actors are more complex in their fundamental orientation than in the case of the rational choice perspective, and that their actions can be explained on the basis of social norms in addition to a pursuit of self-interest. Additionally, if we were to transfer the insights of Hardin's model onto the behavior of states, we would reach the obvious conclusion that a state is far more complex than an individual. For a start, a state is not always unitary in its views and its politics can rather be defined as the sum of different and sometimes diverging groups (Hveem 1996). What in the end becomes official policy is a result of interaction between the domestic realm, where confrontations between domestic interests unfold, and international considerations.

According to Jentoft (2004) we may regard Hardin's model as a useful analytical model rather than an empirical representation. The tragedy of the commons should be viewed as an "ideal-type" tragedy which can be a helpful tool for comparison with real world situations. If we discover that Hardin's model does not describe what we see in the real world, the disparity between what the model predicts and what reality reveals begs for further scrutiny.

Jentoft gives several examples of fisheries related studies where the use of the model and its management prescriptions have been controversial. The introduction of Individual Transferable Quotas (ITQs), in effect a way of privatizing access to fish resources, has been justified with reference to Hardin's model. However, the assumptions of perfect market conditions and rationality are often not transferable to the actual world. If social relations are not structured according to the principles of the market, the introduction of ITQs may have undesirable effects on the social web of coastal communities.

Another line of criticisms stems from the model's emphasis on coercion, for example in the form of state intervention, as a solution to the management problem. According to some scholars this underestimates the ability of local communities to regulate access to, and extraction from, a common pool of fish resources. The basic assumption is to a large extent Hardin "turned upside down": the use of a common resource does not lead to unavoidable depletion. On the contrary, resource dependency provides local communities with an inherent interest in sustainable resource use. This line of reasoning paves the way for management arrangements which recognize both the role of government agencies and the importance of local involvement and responsibility (co-management).

There are many lessons to be drawn from Hardin's article and the associated studies in the field of collective action problems and common pool goods. One important lesson is that the actors who have access to a shared resource are best served by agreeing on a common policy with regard to its utilization.

3.3 International negotiations as two-level games

A theoretical framework which takes both the domestic and international levels into consideration in a fruitful interplay, is Putnam's (1988) two-level game theory. Whereas the tragedy of the commons is related to rational choice theory and a one-level perspective, the two-level games are associated with co-operative action theory and an institutional perspective. An important distinction between the two is that the tragedy of the commons can function as a rationale behind the need for management,

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while two-level games have the potential to explain how and why management outcomes are brought about (or not brought about).

Unlike state-centric theories, the two-level approach recognizes the inevitability of domestic conflict about what the national interest requires. It recognizes that central decision-makers strive to reconcile domestic and international imperatives simultaneously (Asgeirsdottir 2008).

The acknowledgement of the role of domestic concerns in formulating national priorities and positions has been a central feature in studies of international politics for decades. However, Putnam's article is by many viewed as one of the most successful attempts to bring the domestic and international levels together in a systematic manner. It is therefore no coincidence that his approach has been applied in numerous studies in the field of political science and related disciplines.

An important element of the "social process" to be studied in this thesis is the international negotiations between the parties participating in the fishery of North East Atlantic mackerel. The negotiations are in many ways the most visible stage of the process and an arena where the parties make statements, express agreement or disagreement, seek common ground, and forge deals. It therefore makes sense to put negotiations at the centre of our analysis.

3.4 The main features of the two-level model¹⁶

According to Putnam the politics of many international negotiations can usefully be conceived as a two-level game. The assumption is that each party is represented by a chief negotiator and that this individual has no independent policy preferences, but simply seeks to achieve an agreement that will be attractive to his constituents. The process is decomposed into two stages:

¹⁶ Putnam's theoretical framework is a relatively extensive and not all the features discussed in his article are equally relevant to the fisheries negotiations studied in this thesis. I have therefore chosen to focus on what I consider to be the most relevant features.

- 1. Bargaining between the negotiators, leading to a tentative agreement (Level I)
- 2. Separate discussions within each group of constituents about whether to ratify (accept) the agreement (Level II)

The decomposition into a negotiation phase and a ratification phase is useful for purposes of exposition, although it is not descriptively accurate. In real life exceptional effects will be quite important. There are for instance likely to be prior consultations and bargaining at Level II to define an initial position for the Level I negotiations. Conversely, the need for Level II ratification is certain to affect the Level I bargaining. In fact, expectations of rejection at level II may abort negotiations at Level I without any formal action at Level II. In many negotiations, the two-level process may be iterative, as the negotiations try out possible agreements and probe their constituents' views. There may also be cases where the constituents' views themselves evolve in the course of negotiations.

Ratification may entail a formal voting procedure at Level II, such as parliamentary approval. However, in this setting the term refers more generically to any decision-process at Level II that is required to endorse or implement a Level I agreement. The actors at Level II may represent bureaucratic agencies, interest groups, social classes or even "public opinion".

At the national level domestic groups pursue their interests by pressuring the government to adopt favorable policies, and politicians seek power by constructing coalitions among these groups. At the international level national governments seek to maximize their own ability to satisfy domestic pressures, while minimizing the adverse consequences of foreign developments. Neither of the two levels can be ignored by central decision makers.

Each chief negotiator appears at both the domestic and international level. Across the international table sit her foreign counterparts, and at her elbows sit diplomats and other international advisors. Around the domestic table behind her sit party and parliamentary figures, spokespersons for domestic agencies, representatives of key interest groups, and the leader's own political advisors. The composition of the

delegation varies across issues. In fisheries negotiations the delegation is rarely headed by a minister, but rather a senior official from the fisheries authorities. However, it is common that the head of delegation has easy access to the political leadership during important phases of the negotiations, to be able to quickly clarify important issues.

The complexity of the two-level game is that moves that are rational for a player at one board may be impolitic for the same player at another board. Nevertheless, there are powerful incentives for consistency between the two games.

3.4.1 The importance of win-sets

According to Putnam, every country has a domestic win-set, which consists of all bargaining outcomes which would "win" approval of the majority of the constituency at home.

Win-sets are important for two reasons. First, countries will only reach an agreement if their win-sets overlap. Hence large and overlapping win-sets facilitate cooperation. Conversely, the smaller the win-sets the greater the risk that the negotiations will break down. For example, during the lengthy and intense negotiations for a new political agreement to combat climate change in Copenhagen in December 2009, within the framework of the United Nations Convention on Climate Change, several proposals and tentative texts were launched and subsequently rejected by one or more of the negotiating parties. When it transpired that the countries' win-sets did not overlap, several heads of government left the negotiations and it soon became clear that the meeting was a failure.

Second, the size of the win-set will influence the distributive outcome of the negotiations in such a way that a country with a large win-set (that is, with fewer constraints in what it can demand and offer) can be pushed around by a country with a narrower and more constrained win-set. In other words, a small domestic win-set can be a bargaining advantage. A frequently used tactic in this regards is lamenting the domestic constraints under which one must operate.

3.4.2 The factors determining the size of win-sets

According to Putnam there are three main factors determining the size of the win-sets:

1. The size of the win-set depends on the distribution of power, preferences and possible coalitions among Level II constituents.

For example, the lower the cost of "no-agreement" to constituents, the smaller the winset. No-agreement often represents the status quo, although in some cases noagreement may in fact lead to worse outcomes. A case where actors have unrestricted access to a natural resource over time leading to its depletion, may be one example. Furthermore, some constituents will face low costs from no-agreement, and others high costs, and the former will be more skeptical of Level II agreements than the latter. In some cases, evaluation of no-agreement may be the only significant disagreement among the Level II constituents, because their interests are relatively homogenous. In this case the constituents may be composed of hard-liners and doves where their attitude towards an agreement depends on their costs of losing it, and the more the negotiator can win at Level I the better the odds for ratification on Level II.

Participation rates vary across groups and issues, and this variation often has implications for the size of the win-set. For example, when the costs or benefits of a proposed agreement are relatively concentrated, it is reasonable to expect that those constituents whose interests are most affected will exert special influence on the ratification process.

2. The size of the win-set depends on the Level II political institutions.

A case in point is the ratification procedure. For instance, if the ratification procedure changes from simple majority in parliament to a two-thirds majority, the win-set will decrease correspondingly. However, fisheries agreements as the ones dealt with here are normally not put to vote in the national assemblies. It should be noted that ratification procedures do not always have to formalized, they can also take the form

of meetings or informal consultations with institutions and interest groups which eventually accept or reject the agreement.

Some institutional arrangements require several levels of ratification, like the ratification of new constituent treaties in the European Union. The ratification requirements for fisheries agreements are less complex, but a certain involvement of fish industry associations, member countries and EU institutions is always necessary.

3. The size of the win-set depends on the strategies of the Level I negotiators.

Each negotiator has an unequivocal interest in maximizing the other side's win-set. If he knows that his opponent's constituents are divided he may well try to exploit the differences. For example, he can make the case that his own constituents and parts of the opponent's constituents really have the same interests. The more the chief negotiator knows about the composition and interests of the other parties' constituents the better. Another way of expanding his adversary's win-set is to use threats of sanctions. If these are perceived as real and/or potentially damaging, they may work to his advantage. However, there is also the risk of provoking and antagonizing the other party to the extent that his opponent's win-set is reduced instead.

With respect to his own win-set the chief negotiator's motives are mixed. The larger the win-set, the easier he can conclude an agreement, but also the weaker the bargaining position vis-à-vis the other parties. A often used strategy to appear strong and committed to a given position on Level I, is to rally support from the constituents and use this as verbal ammunition in the negotiations. An example could be references to a situation where impoverished fishery communities would literally "be wiped out" if their fishing opportunities are reduced. The risk about this tactic is that expectations among the constituents are set too high, hampering the subsequent ratification of a compromise agreement. Still, interest groups will normally tolerate some differences in rhetoric between the two levels. A technique used to expand one's win-set is to offer side-payments to constituents. In a two-level game the side-payments may come from unrelated domestic sources or they may be received as part of the international negotiation.

Restructuring and reverberation.

Much of what happens in any bargaining situation involves attempts by the players to restructure the game and to alter one another's perceptions of the costs of no-agreement and the benefits of proposed agreements. Such tactics are, according to Putnam, more difficult in two-level games than in conventional negotiations because it is often hard to reach constituents on the other side with persuasive messages. This, however, will depend on whether constituents in opposing states only have divergent interests. Nevertheless, a government involved in international negotiations will frequently try to change the other party's perception of the stakes to its advantage. If the strategy succeeds the opponents win-set will expand, and this will facilitate agreement.

3.5 Summary

In this chapter I tried to answer the question why we need management of natural resources by means of Hardin's work on the tragedy of the commons. We learned that unless the parties with access to the resource engage in some form of co-operation, the likely result is depletion of the resource. Based on this there appears to be a strong case for states to engage in negotiations with a view to achieving binding agreements for the utilization and management of the resource.

Given that international negotiations are at the centre of these efforts, I presented Putnam's model of two-level games where the key concept is that in international negotiations there is both an international and a domestic level, and that an agreement only can be reached if the constituents on the parties' domestic arenas accept it. This situation is referred to as overlapping win-sets. The size of the win-sets is thus an important determinant for the success of the negotiations. In its original version Putnam's two-level metaphor was mainly applied to bilateral negotiations. However, there are no features of the model excluding its application on a larger multilateral setting. In the next chapter this is what I will do.

4.0 THE ROAD TO FULL SCALE CONFLICT

Before I apply the theoretical framework on the information and data I have collected, it is necessary to have a clear understanding of the institutional setting in which the mackerel negotiations take place, and the sequence of events that led to the conflict. There are also other issues that need to be brought to light: North East Atlantic mackerel is a straddling stock, but which ocean areas are we talking about, how was mackerel managed prior to the conflict, which institutions and arrangements had a role in the management decisions, what caused the outbreak of the mackerel conflict, and what is the present status? Below I deal with these questions in turn.

4.1 Institutional setting and management of mackerel prior to the conflict

In recent years the management of North East Atlantic mackerel – and in this context "management" primarily refers to quota negotiations – has been a matter settled by the long-standing coastal nations in the mackerel fishery: the EU, Norway and the Faroe Islands. In 1999 the four parties adopted an international coastal state agreement for the fishery which laid down key principles and reference points for the management of the resource. In October 2008 it was replaced by a new agreement. An important feature of the new agreement was the resetting of relationships between biological parameters, such as the size of the Spawning Stock Biomass (SSB), and the extent of the catches¹⁷.

The coastal states typically meet once a year to agree on a Total Allowable Catch for the following year, and the distribution of it between the parties. The distribution of the TAC has been pretty predictable since the adoption of the first of the two coastal state agreements mentioned above: the lion's share of the quota would go to the EU and Norway, who then had to agree on the exact split in bilateral negotiations, and the Faroe Islands would get a small part, around 5%, as there traditionally was little mackerel in the Faroese EEZ.

¹⁷ "Agreed Record of Conclusions of Fisheries Consultations between the Faroe Islands, the European Community, and Norway on the Management of Mackerel in the North-East Atlantic for 2009", signed on 31 October 2008.

The notion of *coastal state* merits some elaboration. In fishery terminology coastal state means that you have a history of catching mackerel and/or that mackerel has been found within your country's EEZ "over time". However, there is no universally accepted definition of coastal state with respect to a given fishery. For example, how much mackerel must there be in your EEZ before you become a coastal state? Is it sufficient that your fleet has been targeting mackerel for only a couple of years? Since the status of coastal state also implies fishing rights, there is often much discussion on whether a nation should be granted this status or not. In general terms existing coastal states will be reluctant to confer this status to new entrants in the fishery.

The annual coastal state agreement deals with the mackerel within the EEZs. As the mackerel moves in and out of the countries' EEZ, and not always in a predictable manner, it is common to agree on "swaps of quotas" within the national quotas. This is done on a bilateral basis. For example, during their annual negotiations on the bilateral split of their part of the overall TAC, the EU and Norway will normally agree that their fishers can catch a (clearly defined) part of their quota within the EEZ of the other party. The question whether these quotas are actually used or not depends on the seasonal migrations of the mackerel.

Although the conflict level with respect to mackerel has been relatively low for quite some years there are also examples of the opposite: in October 2009 a row erupted between Norway and the EU when the latter denied Norwegian fishers access to catch mackerel in its waters¹⁸. In the view of Norway this was a clear violation of an earlier bilateral agreement. The controversy was solved by negotiations and a new bilateral long term management plan was approved by both parties in January 2010¹⁹.

In addition to the mackerel in the EEZs there is also the mackerel in international waters, which is managed by the North East Atlantic Fisheries Commission

¹⁸NRK (Internet) on 2 October 2009: "EU stopper norske fiskere" ("EUs stops Norwegian fishers", my translation). Web article.

¹⁹ Norwegian Ministry of Fisheries and Coastal Affairs on 28 January 2010: "Norway and the EU have concluded a bilateral fisheries agreement for 2010 and a long term agreement on management of North East Atlantic mackerel". Press release/web article.

(NEAFC)²⁰. As the three traditional coastal states are members of the Commission it is for all practical purposes these states which claim the mackerel quotas for the NEAFC management area, with the exception of a minor part given to other nations, most notably Russia.



Figure 3: Map of Exclusive Economic Zones (EEZs) and international waters in parts of the North East Atlantic. The blue (darker) areas are international waters, where the fish stocks are managed by the North Atlantic Fisheries Commission (NEAFC). Source: Wikimedia Commons.

A part of the NEAFC quota has also been offered to Iceland, but Iceland has objected to accept this arrangement. In accordance with the NEAFC Convention, member states have the possibility to object to a management measure made by the other members under certain circumstances. If such an objection is filed the country is in principle not bound by the measure. However, as long as there was little or no mackerel inside the Icelandic EEZ and in adjacent international areas, there was not much attention paid to this circumstance.

²⁰ The members of NEAFC are: Denmark (in respect of the Faroe Islands and Greenland), the EU, Iceland, Norway and the Russian Federation.

4.2 Stock assessments and Total Allowable Catch (TAC)

In the case of mackerel and many other species of the North East Atlantic, the TAC is based on the assessments elaborated by the International Council for the Exploration of the Sea (ICES), a Copenhagen based scientific body which conducts annual stock assessment surveys and collects various data on the marine environment²¹. The principles of sustainable management and precautionary harvesting levels are key in ICES' work. Through surveys and samples, ICES attempts to determine the likely population of important species, the rate at which they will mature, and the rate at which the fish can be removed without jeopardizing the fishery.

The annual ICES' report with stock assessments and advice on sustainable harvesting levels enjoys high credibility among the member states, and despite the inherent uncertainties in stock assessments there is seldom much discussion of the ICES' estimates during negotiations. When the fishery nations in this part of Europe realize that there is a need to build up a specific stock, they have come to regard ICES' assessments as crucial for setting a sensible harvesting level. Inputs from ICES have also been important for the discussions leading to the coastal state agreement on mackerel adopted in October 2008. ICES considered the agreement to be precautionary, provided that TAC equals the total removals from the stock (ICES 2009:1).

4.3 The conflict breaks out

That mackerel undertakes long seasonal migrations to spawn and feed is a well know fact. Nonetheless, the developments which have unfolded in the North East Atlantic since circa 2006 came as a surprise to many, both marine scientists and fishers.

Iceland is not historically an important mackerel-fishing nation and its pelagic fleet has mostly been geared towards herring and other clupeids. However, from 2006

²¹ Most European coastal states are members of ICES and the bulk of the scientific work produced by ICES is carried out by national fishery research institutes. Some of the surveys are joint surveys where scientific personnel and vessels from two or more countries partake.

mackerel started to appear within the Icelandic EEZ to an ever increasing degree. The pelagic fleet, which at the time experienced a reduction of its catches of herring, began fishing for mackerel: in 2006 the Icelandic fishing vessels caught 4,200 tons, in 2007 36,000 tons, and in 2008 the catch jumped to 112,000 tons. In 2009 the catches of mackerel again increased, to 116,000 tons (see also figure 4 below).

According to the Icelandic Ministry of Fishery and Agriculture there was "a mass migration into Icelandic EEZ"²². As Iceland was not a party to the coastal state arrangement for mackerel, this volume was not a part of any fishery agreement. It therefore came in addition to the quantities that had been agreed by the EU, Norway and the Faroe Islands in their annual negotiations.



Figure 4: Annual catches of mackerel in Icelandic waters 1950-2009. Source: ICES/Statistics Iceland.

The growing Icelandic catches did not go unnoticed in the EU and Norway, and also ICES commented on the issue in the following way: "Unregulated fisheries outside the agreed management plan taken in Icelandic waters and amounting to more than 16% of the total catch in 2008 are a cause for concern" (ICES 2008:77). Still, the overall assessment on the state of the stock was relatively positive in the sense that it was considered to be at full reproductive capacity although at increased risk with respect to the set precautionary levels for fishing mortality.

²² Icelandic Ministry of Fishery and Agriculture: "Atlantic Mackerel". Web article accessed on 5 May 2011.

The fairly good state of the stock was one of the reasons why the Marine Stewardship Council (MSC) certified the Scottish Pelagic Sustainability Group, the owner of 21 large pelagic trawl vessels mainly fishing on the western component of the mackerel stock, as environmentally sustainable in January 2009²³. This was the eighth North East Atlantic mackerel fishery to be certified by MSC. In May that same year the Faroese Pelagic Organization filed an application for MSC certification of its mackerel fisheries²⁴.

Despite ICES' concerns over the unregulated Icelandic fishery there were, at least in Norway, some indications in 2009 that the long-term objective would be to also incorporate the Icelandic catches in the coastal state arrangement. It was claimed, however, that the Icelandic stance so far had been "out of proportions" and that they had been unwilling to co-operate²⁵. Icelandic authorities for their part, had a very different view. It was claimed that Iceland for a number of years had requested to participate in the coastal state consultations on the management of mackerel, but that this had been rejected by the other coastal states which then in effect had excluded Iceland from negotiations on the annual total allowable catch and its allocation"²⁶.

The Icelandic position with regard to the mackerel fishery was firmly established in November 2009 when the Ministry of Fishery and Agriculture announced a unilateral quota for 2010 of 130,000 tons. Iceland defended this decision by pointing to its lack of access to quota negotiations and a rapidly increasing amount of mackerel in its waters. Shortly thereafter the EU, Norway and the Faroe Islands extended an invitation to Iceland to participate in the coastal state negotiations on mackerel in 2010²⁷. In reality this meant that the country was finally considered to be a coastal state with regard to mackerel.

²³ Seafood Scotland: "SPSG mackerel achieves MSC certification 21st January 2008". Web article accessed on 4 May 2011.

²⁴ Marine Stewardship Council on 21 May 2009: "Faroese Pelagic Organisation enters mackerel and herring fisheries for MSC assessment". Web article.

²⁵ Aftenbladet.no on 26 October 2009: "Norge har startet forhandlinger om makrellen" ("Norway has started negotiations on mackerel", my translation). Web article.

²⁶ Icelandic Ministry of Fisheries and Agriculture on 7 April 2009: "Regarding Icelandic Mackerel Fisheries in 2009". Press release/web article.

²⁷ IceNews on 2 December 2009: "Iceland asked to help set mackerel quota". Web article.

In parallel to the developments in Icelandic waters, the Faroe Islands also increased their mackerel catches significantly in 2010. In July the local authorities declared a unilateral quota of 85,000 tons, which was three times the traditional Faroese quota entitlement under the coastal state agreements. With this measure the Faroe Islands in effect broke out of the institutional arrangement represented by those agreements.

The quota increases caused anger in the Norwegian and EU mackerel fleets, and it was apparent that the time for tougher measures had arrived. Norway took swift action and introduced a ban on mackerel landings from both Icelandic and Faroese vessels on 29 July 2010. The initiative spurred Scottish calls for similar measures to be taken by the EU. Such measures were not introduced however, but the EU Commissioner for Fisheries said that "the Commission would contemplate all necessary measures to conserve the mackerel stock and safeguard EU interests"²⁸. Nevertheless, in August and September 2010 angry local fishermen prevented Faroese vessels from unloading mackerel in Scottish ports on several occasions²⁹.

4.4 From bad to worse

The seriousness of the situation became evident when comparisons were made between ICES' advice for 2010 and the actual quotas for that year: the scientists had recommended a maximum TAC of 570,000 tons, whereas the actual catches were heading towards 930,000 tons. In the annual ICES Advice the following was commented: "The absence of effective international agreements on the exploitation of the stock (between all nations involved in the fishery) is a cause of continued concern and prevents control of the exploitation rate" (ICES 2010:31-32).

The serious disagreement between the parties prevented any real progress throughout 2010 despite a series of meetings between coastal state officials in London, Oslo and

²⁸ FishnewsEU.com on 9 August 2010: "All necessary measures to be considered by Commission following Faroese mackerel quota declaration". Web article.

²⁹ BBC News (Internet) on 15 September 2010: "Faroese boat abandons Peterhead landing amid wrangle". Web article.

Copenhagen. On the margin of the Copenhagen meeting, in December, the disagreement also started to have negative repercussions on other agreements as it turned out that Norway and the Faroe Islands were unable to agree on a bilateral quota agreement for 2011^{30} .

Later the same month the Icelandic Ministry of Fishery and Agriculture decided to set the country's mackerel quota for 2011 at a level of 146,818 tons. The announcement was accompanied by a request to the other coastal states to take Iceland's share into consideration in their quota decisions³¹.

A new round of mackerel talks, the seventh round, was held in Oslo on 9-11 March 2011. Again the negotiations come to naught. Shortly thereafter the Ministry of Fisheries of the Faroe Islands declared that a unilateral mackerel quota of 150,000 tons had been set for 2011. Like in Iceland the decision was accompanied by calls to the other coastal states to take the Faroese quota into account and it was highlighted that "the obligation shared by the coastal states to seek consensus on mackerel management must be approached by all parties on an equal footing, with a clear recognition of the changes in the distribution of the mackerel stock"³².

By adding the Icelandic and Faroese quotas to the already existing quotas of the EU and Norway, which are determined by the long-term agreement of January 2010, we arrive at a total estimated catch of 942,818 tons in 2011. This figure is 46% in excess of 646,000 tons, which is the level of fishing considered sustainable by ICES. Although all parties express concern over the future of the stock the willingness to reconsider own positions seems limited.

³⁰ The annual quota agreement also deals with a range of other species including demersal species and herring.

³¹ Icelandic Ministry of Fishery and Agriculture on 20 December 2010: "Decision on Iceland's share in Mackerel Fisheries in 2011". Press release.

³² Worldfishing.net on 15 March 2011: "Faroese mackerel fisheries in 2011". Web article.

5.0 THE MACKEREL NEGOTIATIONS AS A TWO-LEVEL GAME

Fisheries negotiations like the ones studied here deal with the pursuit of economic values, a central feature in the relation between states. Security and stability are often regarded as the principal objectives of states in international politics, but after that welfare has an important place. Some scholars would even argue that security is not a goal in itself, only a precondition for the states' pursuit of welfare for their citizens.

As fish quota negotiations may have a direct impact on the national welfare it is natural to expect close links between the international arena, where the negotiations take place, and the domestic arena. Putnam (1988:427) refers to this connection as "the entanglement of domestic and international politics".

From chapter 3 we recall the importance of a win-set, i.e. all bargaining outcomes which would "win" approval of the majority of the constituency at home. An agreement can only be reached if the parties have overlapping win-sets. As we have seen there is currently no agreement in place for North East Atlantic mackerel. In other words: the parties' win-sets do not overlap. Before I start examining this question it is necessary to obtain more knowledge of how the mackerel negotiations are conducted.

5.1 Defining the negotiations process

In order to engage in international negotiations on mackerel each party, represented by its delegation, needs a mandate. The mandate is crucial as it contains relevant background information and defines the national positions and priorities. It will usually also specify how much flexibility the negotiator has with regard to the top priorities and it will give an indication of the "bottom line". For all of the four parties in the mackerel conflict it is a requirement that the mandate is politically approved at the highest level of the institution with the authority to negotiate. Usually the mandate will be in the form of a written document³³.

³³ There may also be instances where it is not written. However, it is an absolute requirement that priorities and positions are "understood" in the same way by the political leadership and the negotiator.
The negotiations on mackerel resemble other fishery negotiations in the sense that they are fairly structured. According to established procedure every meeting begins with a plenary session where the parties participate with their full delegations. Each of the heads of delegation, typically a senior official from the fisheries authorities, will make an opening statement which refers to recent developments and information and highlights the party's main stance and priorities. If there has been an adjustment of previous positions or if the party intends to launch a new proposal or initiative, these will be presented. Still, the opening statements tend to be relatively short, and they are normally not used to elaborate much on details.

The plenary meeting is then followed by a meeting of the heads of delegation plus one. The person who accompanies the head is usually a desk officer with extensive knowledge of the matter. In this meeting the parties go into detailed discussions. Statements made in the plenary will be elaborated on and the negotiators will try to get a better understanding of the other parties' positions. New ideas and proposals may be tried out to get an impression of where the other parties stand and how far they are willing to go. The format of heads plus one is considered to be crucial as the absence of the other delegation members, who may have narrower priorities and agendas, makes the negotiators speak with fewer constraints. Hence, it is easier to detect if there is common ground which can make the negotiations advance³⁴.

The meeting of the heads of delegation will be followed by consultations within the delegations and sometimes with the relevant constituents in the home countries. If new information emerged in the heads of delegation meeting, for example in the form of a new proposal on a particular area, this will be debated and weighted against own priorities. Some of the constituents may need to consult with the leadership of their organizations. In terms of Putnam's model this stage is a part of the Level II discussions, where the constituents discuss whether to approve an agreement.

During a round of negotiations there will typically be several meetings of heads of delegation and numerous consultations within the delegations. If new information and

³⁴ Interview with official of the Norwegian Ministry of Fisheries and Coastal Affairs on 2 May 2011.

proposals are of such a nature that they would affect the existing positions in a significant way or make the negotiations take an unexpected turn, the head of delegation will consult the political leadership of his institution in the home country. He will inform them of the new developments, make suggestions as to how to react to them, discuss alternative course of action, and ask for acceptance with regard to possible next steps.

If the delegations feel there is common ground with the potential to bring the negotiations forward, the negotiations can go on for days. On the other hand, if they have the impression that any consensus is still far away, the talks will be very short.

Although the meetings play a decisive role in the mackerel negotiations we should not ignore what happens *between* the meetings. Statements by the chief negotiator, the political leadership of the institution with the authority to negotiate, or members of the delegation, most notably representatives of the fishery industry, are often made with the purpose of sending a signal to the other parties.

The signals may have several functions ranging from bolstering own positions to indicating willingness to compromise. As public servants there are also limits to how negotiators can phrase their views in the public domain: "There are things that an official will find it difficult to say to the press because it could be viewed as an escalation. In such cases it is better that tough messages are sent by the industry instead"³⁵.

5.2 Level II constituents in the mackerel conflict

In Putnam's terminology "ratification" refers to any decision-process at Level II that is required to endorse or implement a Level I agreement. It is a fact that the kind of agreement dealt with here does not require approval by the national assemblies. So which are the Level II constituents in the EU, Norway, Iceland and the Faroe Islands?

³⁵ Interview with official of the Norwegian Ministry of Fisheries and Coastal Affairs in Oslo on 3 January 2011.

The European Union

The EU, by means of its composition and structure, is the most complex of the four. It is the European Commission, represented by the Directorate-General for Maritime Affairs and Fisheries (also known as DG MARE), which is in charge of the negotiations. With regard to recommendations for TAC and fishing quotas DG MARE consults with its advisory body, the Scientific, Technical and Economic Committee for Fisheries (STECF). However, there are numerous other actors involved in the internal processes related to the mackerel negotiations. It is no coincidence that the EU delegations in the negotiations are by far the largest³⁶. Many of these actors have the power to influence EU positions, at least in formal terms, but only a few have veto power over a tentative agreement on Level I. It should also be noted that there appears to be a certain degree of overlapping of roles and competences.

The Pelagic Regional Advisory Council (PELRAC), a body consisting of the major pelagic industry interests but also non-governmental organizations (NGOs), plays an important role on EU's Level II. PELRAC is an institution on Community level which mainly represents the industry and the vessel owner's interests, but the fact that other than purely industry actors are represented may influence the Council to take a slightly broader perspective with regard to the mackerel conflict³⁷. In intense phases of the mackerel negotiations there will be frequent contact between DG MARE and PELRAC.

There are important Level II actors on the regional and local level in the countries with significant mackerel fisheries, which are Ireland and the United Kingdom. In the latter these fisheries are concentrated in Scotland. In Ireland and Scotland the mackerel is by far the most important species for the local fishing fleets, both in volume and income. In several Scottish coastal communities, mackerel represents an extremely important source of income.

³⁶ In addition to the DG MARE officials the delegation will normally also include representatives of the EU presidency, the Secretariat of the Council of Ministers, and several member countries. The fishing industry, both on EU and local level, may also be represented.

³⁷ Interview with official of the Directorate-General for Maritime Affairs and Fisheries in Brussels on 4 May 2011.

Fishing employment is mainly in the catching and processing sector. Although fishers represent a small percentage of the national workforce, fishing (from capture to handling, processing and marketing and final sale) is a particularly important socio-economic activity in remote coastal regions where few alternative employment opportunities exist. In this regard it should be noted that the official unemployment rate in Scotland is 8.1%, which is over the United Kingdom average³⁸.

An influential player in Scotland is the Scottish Pelagic Fishermen's Association (SPFA), which follows the mackerel conflict closely and has made several calls to the Commission to defend their members' interests³⁹. It is national associations like the SPFA which represent the mackerel industry in PELRAC.

What role is there for member countries in the mackerel conflict? Since fisheries are an area of competence of the European Community it is the Commission that has the final say. However, the member countries' governments and politicians have several ways to make their voices heard. Firstly, associations like the SPFA will also lobby its own government (in this case the Scottish Government and the Government of the United Kingdom) which can take the matter further, usually to the EU Council of Ministers. An Irish example of this course of action happened at a Council of Ministers meeting in July 2010, when the Irish Minister for Agriculture and Fisheries, after having received grievances from his national fishing sector, complained that Iceland was operating its mackerel fishery outside international management arrangements⁴⁰.

Secondly, members of the European Parliament (EP), typically members from fishery dependent regions, can bring up the matter in the EPs Committee on Fisheries and lobby national governments and the Commission. Like most politicians, members of the EP will also use the media to speak up for the interests of their constituents⁴¹.

³⁸ Scotland Office on 16 March 2011: "March Labour Market Statistics for Scotland". Web article.

³⁹ See web site of SPFA: www.scottishpelagic.co.uk/news_views/mackerel_dispute.htm

⁴⁰ Irishtimes.com on 15 July 2010: "Iceland's growing mackerel catch muddies waters for EU bid". Web article.

⁴¹ See for example BBC News (Internet) on 24 August 2010: "Why is Britain braced for a mackerel war" (web article). In the article the British Member of EP, Mr Struan Stevenson, calls for an EU-wide blockade of Icelandic and Faroese boats.

It is difficult to find actors on Level II with a similar influence on the EU's position in the mackerel conflict as the as Scottish/British and Irish pelagic fishing interests and their allies, most notably their own governments. Even though the mackerel fisheries represent a tiny fraction of the EU's economy and have little economic importance also in their own countries, they enjoy enormous influence on the Union's stance in the negotiations. It is unlikely that the affected voters would be many enough to punish many politicians at the next elections, but it would not look good politically if the EU turned its back to these regions. It is therefore unconceivable to enter into an agreement on mackerel without the acceptance of this constituency.

Norway

Norway has long fishery traditions all along its coast although they are of greatest importance on the west coast and in the northern part of the country. In many municipalities in the north local employment relies almost entirely on the fisheries and related industries.

However, if we look at the industry as a whole it is evident that the fisheries have lost much of their former importance. In 1950 the sector employed about 100,000 people but today the figure is less than 12,000, which only corresponds to approximately 0.5% of the working population⁴². The main part of the production is exported and the fisheries sector represents 5-6% of the total export earnings. This is of course not insignificant, but the income from oil and gas is many times bigger. The single most important species is farmed Atlantic salmon which has become a very profitable export commodity. Although the catches and exports of mackerel have gone up the last years the export value of salmon in 2010 was ten times larger than the export value of mackerel⁴³.

The Norwegian fishing industry is highly organized. The peak organization which represents both owners and employees, is the Norwegian Fishermen's Association

⁴² Source: Statistics Norway.

⁴³ Norwegian Seafood Export Council: "Statistical overview for 2010". Web article accessed on 6 May 2011.

(Norges fiskarlag). With respect to the pelagic fisheries the Association of Vessel Owners (Fiskebåtredernes forbund) plays a prominent role. It is common that representatives of these organizations participate as members of the Norwegian delegation in the mackerel negotiations. They are also consulted with respect to the formulation of the mandate although there is evidence that they are not as closely involved in this process as their counterparts in Iceland (Asgeirsdottir 2008:95).

Even though the pelagic fleet provides important employment along the coast, especially on the west coast, it appears to have a less crucial role as job provider than in the case of some of the coastal regions in Scotland. This can partly be explained by the absence of land-based processing industry for mackerel. In addition, the Norwegian economy has been strong for many years and the unemployment rate is circa 3.5%. This is in part due to the impact of the profitable petroleum industry, which is concentrated in the western parts of the country. In some Scottish communities the local economy to a great extent relies on the income from the mackerel fisheries. This is less of a case in the western part of Norway and may explain why the political engagement in the mackerel conflict does not seem that great, at least for the time being. Nevertheless, it is fair to say that the pelagic fishers have a decisive influence on whether Norway can accept a mackerel agreement.

Iceland

The importance of the fisheries sector in the Icelandic economy has always been high. Although other industries have grown a great deal in recent years, most notably powerintensive industries such as aluminum production, fisheries represent 40% of the export earnings and offers employment to 7% of the work force. It is no accident then, that the power of organized fishing interests in Iceland is large and some have gone so far as to say that what the vessel owners want, they get (Asgeirsdottir 2008:99).

The main interest organization is the Federation of Icelandic Fishing Vessel Owners. The other groups that have delegates in the international negotiations process are the labor unions which represent the different groups working on fishing vessels. The influence of these groups does not match the influence of the vessels owners who control all the capital. Although the two groups may be at odds in their home arenas they normally agree on a common line in the context of international negotiations (Asgeirsdottir 2008:96). Historically the Icelandic Government has been willing to pursue fishery friendly economic policies, especially measures improving export earnings. In recent decades Icelandic authorities have created incentives for the development of other industries, like the above-mentioned aluminum industry.

Another sector that developed rapidly in the years following 2000 was the banking sector, which collapsed in the autumn of 2008. The ensuing economic melt-down led to one of the worst economic crisis in Iceland's history, prompting the country to submit an application for EU membership in July 2009. The accession negotiations are not easy however, not least due to the fisheries sector, and the legacy of the banking crises in the form of the Icesave dispute casts dark shadows over the discussions.⁴⁴

Even though the Icelandic delegation is headed by an official from the Ministry of Foreign Affairs it is fair to say that the industry dominates Icelandic positions in the mackerel negotiations. In this regard it should be noted that the importance of mackerel in Icelandic fisheries has grown a great deal. We recall that the quota for 2011 has been set to 146,818 tons. The quota for cod, traditionally one of the most important species for Iceland, has been set to 160,000 tons for the season 2010/2011⁴⁵. It seems logical to conclude that on Iceland's Level II it is by and large up to the Icelandic pelagic fleet to decide whether an agreement is acceptable.

The Faroe Islands

The fisheries sector is extremely important for the Faroe Islands, which has a total population of less than 49,000 people. It employs 16% of the work force and

⁴⁴ The Icesave dispute is a diplomatic dispute between Iceland on one hand, and the United Kingdom and the Netherlands on the other. It is centered on the Icelandic reluctance to reimburse the Dutch and UK Governments for their payments to holders of accounts under the Icesave brand, which became inaccessible as a result of the collapse of the Landsbanki. The issue of an Icelandic obligation to cover the losses of the two countries has been the subject to two referendums in Iceland.

⁴⁵ Icelandic Directorate of Fisheries on 26 August 2010. "Total Allowable Catch (TAC) of species within the Icelandic EEZ". Web document.

represents about 95% the export earnings⁴⁶. It is telling that the economic performance of individual companies in the fisheries sector can have a significant impact on the local economy: in the last half of 2010 the unemployment rate jumped from 5.8% to 6.9% due to the bankruptcy of the company Faroese Seafood⁴⁷. An economy as the Faroese, with high dependence on fish products and exportation, is bound to be vulnerable to the changes in catches, fish prices, and exchange rates.

Herring, blue whiting and mackerel are the foundation for the pelagic fleet. Like in all other fisheries consultations the industry participates in the preparations prior to the negotiations and is represented in the Faroese delegation. This gives the industry possibility to put forward their views and they may in that way influence the mandate⁴⁸. The two main industry associations are the Faroese Shipowner's Association and the Faroese Pelagic Fleet. It is the Ministry of Fisheries which is in charge of the negotiations and the Minister authorizes the mandate prior to any round of talks. By law it is stipulated that if important foreign policy issues are at stake, the Minister shall consult the Committee of Foreign Policy of the Parliament. However, he may choose to follow the advice or not.

It follows from this that the Faroese Level II is dominated by the interests of the pelagic fleet. Given the enormous importance of the fisheries sector in general, it would be unimaginable for the Faroese authorities to accept a Level I agreement that went against the fleet's interests to any significant degree. If they did they would run a high risk of being punished in the next elections.

Summing up the Level II constituents

There are many similarities between the Level II constituents in the four parties. The interests of the pelagic fishers, first and foremost represented by the vessel owners, have a significant weight in the formulation of positions.

⁴⁶ Landsbanki Føroya (the Governmental Bank of the Faroe Islands) on 10 March 2011: "Economic Assessment". Web document.

⁴⁷ See foot note 46.

⁴⁸ E-mail correspondence with official of the Faroese Ministry of Fisheries on 4 May 2011.

This is in line with Putnam's assertion that we should expect that those constituents whose interests are most affected by the outcome of the process will exert special influence on the ratification.

Even in the EU, where the mackerel is of negligible economic importance, the interests of some few coastal regions in the periphery appear to have veto power over the outcome. The fact that the fishing industry has decisive influence on whether to accept an agreement is easier to understand in the case of Iceland and the Faroe Islands, where the fishing sector is of paramount importance. Also in Norway it is to a large degree the pelagic interest groups which set the agenda, but the industry does not have the same significance as in the two former nations.

It is difficult to discern additional interest groups or other actors on Level II with a stake in the mackerel negotiations. Given that the mackerel may become overfished one could have expected that conservation groups would make contact with the national authorities to ask for reductions in the quota demands, but this has not happened.

5.3 Non-overlapping win-sets

It is evident that the win-sets of the EU, Norway, Iceland and the Faroe Islands do not overlap. In order to have a better basis for analyzing the different stages of the negotiations, it may be worthwhile to take a closer look at the nature of the four parties' win-sets.

If it was only up to the EU and Norway, the coastal state agreement of 2008 would still be the basis for the distribution of the TAC for mackerel, perhaps with some minor adjustments to cater for the large influx of mackerel into Icelandic and Faroese waters. This means that the EU and Norwegian win-sets overlap. They may not overlap *completely*, as there will always be a certain motivation for increasing your own share, but it is fair to say the EU and Norway have very similar viewpoints in the mackerel conflict. The Faroese win-set overlapped with those of the EU and Norway until mid 2010, when the country's authorities set a unilateral mackerel quota of 85,000 tons. By doing this they effectively broke out of the coastal state agreement. The size of the quota was significant and signaled that their win-set had been reduced a great deal.

In contrast, Iceland's win-set has never overlapped with those of the EU and Norway. As long as the coastal state agreement was functional the country objected to the annual quotas which were put at the disposal of "other countries" within the framework of the North Atlantic Fisheries Commission (NEAFC). Instead Iceland started to fish mackerel on a unilateral basis from 2006, first at low levels, but with a substantial increase from one year to another. In 2010 the Icelandic TAC was set to 85,000 tons, a figure which upset both the EU and Norway, and clearly demonstrated that Iceland's win-set was both small and far away from the two other parties.

With respect to 2011 both Iceland and the Faroe Islands chose to significantly increase their quotas, to 146,818 tons and 150,000 tons respectively. In Putnam's terminology they shrank their win-sets even further. As the EU and Norway did not adjust their own portion of the TAC for mackerel, these measures drastically increased the distance between the positions of Iceland and the Faroe Islands on one side, and the EU and Norway on the other.

5.4 Distribution of power, preferences and coalitions on Level II

According to Putnam's model the size of the win-set depends on the distribution of power, preferences and possible coalitions among Level II constituents. How can we apply this to the mackerel negotiations?

If constituents feel the cost of "no-agreement" is low, the win-set will be small. When I look at the negotiations process it seems obvious that the cost of no-agreement, at least for the time being, is low. Norway and the EU still apply the basic idea of the coastal state agreement on the TAC recommended by ICES, and Iceland and the Faroe Islands have set large unilateral quotas. If it was felt that the cost of these strategies was high the parties should be willing to make compromises at the negotiations table. This does not seem to be the case and the reason is probably that there is currently a great deal of mackerel in the ocean.

It is likely however, that the perception of costs will change as times goes by. If no agreement is reached for this and the coming year the mackerel stock will probably be severely overexploited. The result will be less fish available for the fishers, smaller landings and less income. If the fishing effort is so large that the biological balance of the stock is threatened – this may for example happen if the Spawning Stock Biomass (SSB) is reduced to an unsustainable level – the long-term state of the stock will be at risk. The consequence may be a long period of low catches and the introduction of strict measures to build up the population.

One might expect that these long-term considerations would constantly influence the parties' positions, but so far this does not seem to be the case.

In the mackerel conflict the interests of the level II constituents in the four parties appear to be pretty homogenous. It is difficult to detect any significant internal divergence. The way the conflict has evolved makes it safe to say that the four constituents are composed of hard-liners and the more the negotiator can win at Level I the better the odds for ratification on Level II.

5.5 Political institutions on Level II

Even though the institutions involved in the negotiations are relatively different the ratification is similar: there are few formal procedures and an agreement does not have to be voted on in the national assemblies. There is rather a process of continuous consultation and feedback between the officials heading the delegation and the representatives of the industry. The EU to some extent deviates from this procedure as a great deal of these consultations take place via representatives of the member countries⁴⁹. Still, based on interviews and correspondence with fishery officials in all four countries the following pattern emerges: based on the mandate and the outcome of

⁴⁹ Interview with official of Directorate-General for Maritime Affairs and Fisheries in Brussels on 4 May 2011.

the internal (Level II) consultations, which sometimes includes a couple of telephone conversation with the political leadership, the head of delegation will "understand" when an agreement is acceptable. So far there are few indications that proposals with "agreement potential" have been made by any of the parties.

The question of which institution is in charge of the negotiations and how it relates to political institutions on Level II merits consideration. If the Ministry of Foreign Affairs is in the driving seat one could expect that the sector interests would be somewhat less influential as this Ministry is charged with upholding good political relations with other countries.

The fact that in the EU, Norway and the Faroe Islands it is the fisheries authorities heading the negotiations, could be an indication that other than purely fishery interests receives little attention. This, in turn, implies small win-sets. In reality the situation is more complex. In Norway the Ministry of Fisheries will consult with the Ministry of Foreign Affairs, in particular in issues related to international law⁵⁰. If there are important foreign policy issues at stake the Foreign Ministry will be given greater role in the negotiations. So far this has not happened in the mackerel negotiations.

In the case of the EU, DG MARE seems quite autonomous in the negotiations. For example, there does not seem to be any formalized contact between the DG MARE and the External Relations Service or the office of the High Representative of Foreign Affairs and Security Policy. Also in the case of the Faroe Islands there appears to be few effective constraints on the leading role of the Ministry of Fisheries. The Minister of Fisheries shall consult with the Foreign Policy Committee of the Parliament when foreign policy issues are at stake, but he does not have to follow its advice. When it comes to the Ministry of Foreign Affairs, which was only established in 2008, it appears to be politically weak⁵¹.

⁵⁰ Interview with official of the Norwegian Ministry of Fisheries and Coastal Affairs in Oslo on 2 May 2011.

⁵¹ Winthereig, Øssur on 6 December 2010: "Færøsk makrelstrid er fiskeripolitik og ikke udenrigspolitik", ("Faroese mackerel conflict is fisheries policy and not foreign policy"- my translation). Web article.

Iceland is the only country where the Ministry of Foreign Affairs seems to have a more formalized role⁵². However, to judge from the policy in the mackerel conflict it does not seem that general foreign policy issues are taken into account to any significant degree.

In summary, the institutional set-up in the four parties is decisively geared towards the interests of the fishing industry. Few, if any, other concerns seem to play a role.

5.6 Strategies of the negotiators, and attempts at restructuring the game

Each negotiator has an obvious interest in maximizing the other side's win-set and he may use different techniques to this end. The best way to study the negotiators' strategies is to be present during the talks or read the parties' internal protocols afterwards. Since the negotiations are not open to the public and the protocols are exempt from the public domain, my focus will be on the negotiators' communication and the communication of his institution *between* the negotiations meetings.

The parties have attempted to influence each other positions on many occasions throughout the conflict. The goal is to expand the win-sets of the opponents and thereby increase the likelihood of them accepting a deal that is as close as possible to your preferences. A great deal of the dynamics in the mackerel negotiations involves attempts by the players to restructure the game and alter the other parties' perceptions of the costs of no-agreement and the benefits of proposed agreements. A frequent way to apply this strategy is to refer to (new) science. In the following I will consider these dynamics in more detail.

In 2009 Norway and the EU started to realize that Iceland's catches of mackerel were about to become an important, if not welcome, component of the fishery. We recall that the relatively large Icelandic catch of mackerel in 2008 (112,000 tons) was increased to an even higher level in 2009 (116,000 tons). The Icelandic authorities

⁵² The Head of Delegation is an official of the Ministry of Foreign Affairs.

were well aware of this and issued a memorandum regarding the country's mackerel fisheries in 2009⁵³. In the memorandum the following points were made:

"Iceland is a coastal State with respect to the mackerel stock. Historic fishing patterns, including extensive mackerel fisheries on the border of the Icelandic exclusive economic zone, demonstrate that mackerel has consistently been in some abundance in waters under our national jurisdiction.... Iceland is in full right as a coastal State to utilize mackerel; however the right to use a shared stock comes with an obligation to cooperate with other coastal States according to the UN Convention of the Law of the Sea. Iceland has for years sought to cooperate with the other coastal States for this purpose but have so far been rejected. The conservation and management of the mackerel stock is the collective responsibility of all the coastal States and it is paradox that at the same time as Iceland is accused of not being responsible it is excluded from the management consultations by the other coastal States...".

The document is an attempt to redefine the fundaments of the game: by constructing a link between the presence of mackerel and the Iceland EEZ, the case is made that the mackerel is in effect a shared stock and that Iceland has a historic right to it. Furthermore, it is claimed that Iceland for years has been seeking co-operation with the other coastal states to rectify what they consider to be an unjust arrangement.

It is evident that by issuing the memorandum Iceland was hoping to create acceptance for its policies. In other words: Iceland tried to expand the EU and Norwegian winsets. As we know the attempt had little effect on their positions. The only effect it had was probably to bolster EU and Norwegian skepticism even further. As one Norwegian fishery official put it: "I've been around quite some time and seen many Icelandic demands throughout the years. But the Icelandic history-based claim to the mackerel is one of the most unfunded claims I've ever seen"⁵⁴.

So, rather than being forthcoming towards Icelandic arguments, EU and Norwegian reactions went in the opposite direction, a fact that did not go unnoticed in Iceland and

⁵³ Icelandic Ministry of Fishery and Agriculture on 7 April 2009: "Regarding Icelandic Mackerel Fisheries in 2009". Web article.

⁵⁴ Interview with official of the Norwegian Ministry of Fisheries and Coastal Affairs in Oslo on 2 May 2011.

by all likelihood just confirmed what the Icelanders already suspected. In December 2009 the country declares a unilateral TAC of 130,000 tons for the following year.

Despite contact between the parties in the first half of 2010 no progress is made, and in July the Faroe Islands declare that they will catch 85,000 tons that same year. The ensuing reaction from Norway in the form of a unilateral ban on landings of mackerel from Faroese and Icelandic vessels from 29 July – effectively a form of economic sanction – was the most direct measure in the conflict so far. In Norway this kind of measure is almost "automatic" in cases where other nations do not take sufficiently responsibility for the management of a common resource⁵⁵. By introducing the ban Norway tried to increase Iceland's and the Faroese Islands' costs of no-agreement and expand their win-sets.

It is an open question whether the ban has had any real effect. Given that neither Iceland nor the Faroe Islands reduced their quota ambitions in the following period, it is tempting to conclude that the effect was minimal. Market reports for 2010 indicated that Iceland had few difficulties in landing and selling its mackerel⁵⁶. It is likely that the main effect of the ban was symbolic, and on two levels: on one hand a strong signal was sent to Iceland and the Faroese Islands that their actions were inacceptable, and on the other hand the authorities demonstrated a clear commitment to help the Norwegian mackerel fishers.

The Icelandic and Faroese quotas and the Norwegian ban on landings influenced EU rhetoric in the sense that the DG MARE started to speak of the possibility of sanctions against Iceland and the Faroe Islands. An EU-wide ban on landings was one of the options according to the Commissioner on Fisheries and Maritime Affairs, and she stated that the Icelandic decision to increase its mackerel quota risked impacting negatively on the country's negotiations to join the EU⁵⁷. This was an unconcealed threat that the mackerel conflict had the potential to affect an issue of high political

⁵⁵ See foot note 52. It is, however, doubtful if political considerations are entirely absent.

⁵⁶ Fishupdate.com on 25 January 2011: "Iceland finds willing markets for its mackerel". Web article.

⁵⁷ Financial Times (Internet) on 24 August 2010: "Iceland defiant over mackerel catches". Web article.

importance to Iceland. By linking the two issues the conflict was escalated even further.

In the eyes of the Commissioner the statement undoubtedly had the potential to increase the cost of no-agreement to the Icelanders. Again it is doubtful if the move had any notable effect as there is difficult se see any changes in the Icelandic win-set during the ensuing period. On the contrary, in a press release from the Icelandic Ministry of Fishery and Agriculture the threats of sanctions are vehemently refuted and it is stated that any such measure "would be a clear violation of the EFTA Convention, and the GATT and EEA Agreement"⁵⁸.

A major attempt at restructuring the game was made by the Faroese authorities in the form of an information memorandum issued in October 2010. The attempt was related to the discussion of the possible causes for the changed migration patterns for mackerel observed from 2006, and the consequences of these changes. In the past the bulk of the two northern spawning components mainly stayed west of the British Isles and in the North Sea, but the last years large quantities of mackerel have migrated northwards into Faroese and Icelandic waters. The scientists struggle to understand the causes for this new trend. Compared to other species such as the cod the mackerel prefers warmer water, so a possible reason for the shift in the migration pattern may be that the temperature of the surface water in the north Atlantic has increased.

Some reports indicate that this has in fact happened, which in turn would be consistent with projections for global warming and the melting of the polar ice cap. However, there is no consensus among marine scientists as to which are the real causes for the new migration pattern.

⁵⁸ Icelandic Ministry of Fishery and agriculture on 6 August 2010: "Joint Responsibility of the Four Coastal States for the Management of the Mackerel Fisheries". Press release/web article.

In the Faroese memorandum the following was stated⁵⁹:

"The joint ecosystem survey carried out by the Faroe Marine Research Institute and marine research institutes in Norway and Iceland in July and August 2010 has confirmed that the distribution and abundance of mackerel is further west and north than previously measured, with a high density in the Faroese zone. Results from the 2010 egg survey, in which the Faroe Islands participated, confirm that mackerel also spawns in Faroese waters. This was already indicated by the results from the last egg survey in 2007.... It is with this basis that the Faroe Islands are seeking a larger share in a new multilateral management arrangement for mackerel".

In the memorandum it is claimed that not only does the mackerel spend considerable time in Faroese waters, it also spawns there. Spawning is often an important criteria in surveys aimed at mapping the distribution of a given stock. If you can prove that there is a great deal of spawning in your waters, you normally have a more solid basis on which to make a claim of "ownership". In other words: by making the abovementioned assertion the Faroese authorities tried to establish convincing links between the presence of mackerel and quota demands. From internal Faroese discussions it also emerged that they, with respect to the assessment of stock distribution, wanted more weight to be attached to the location of the species in the summer months, the period with the greatest influx of mackerel⁶⁰. The purpose of putting forward all these arguments was to influence the EU and Norwegian understanding of the distribution of the stock, and to make them widen their win-sets.

As there is no consensus among scientists as to the causes of the changed migration patterns, there is so far little evidence that the Faroese strategy, also shared by Iceland, has had any effect. Although the Norwegian fisheries authorities acknowledge that the migration pattern of mackerel is undergoing changes they are not at all convinced that the changes will be of a lasting character: "If it turns out that the changes are only

⁵⁹ Faroese Ministry of Fisheries (October 2010): "International Management of Northeast Atlantic mackerel". Information memorandum/web article. Accessed on 6 May 2011.

⁶⁰ Winthereig, Øssur 6 December 2010: "Færøsk makrelstrid er fiskeripolitik og ikke udenrigspolitik", ("Faroese mackerel conflict is fisheries policy and not foreign policy"- my translation). Analys Norden.

temporary, which we believe, the Icelandic and Faroese attitudes will appear in a pretty interesting light,⁶¹.

Also the EU is profoundly skeptical towards the Icelandic and Faroese arguments that the mackerel, possibly due to warmer surface waters, have established itself in new areas on a lasting basis. In addition, DG MARE is of the view that one of the main reasons why mackerel is found in Icelandic and Faroese waters during parts of the year is that the stock is in a pretty good shape. The healthy state of the stock, DG MARE says, is primarily a result of the protective management by the long-standing coastal states. To the EU, the Icelandic and Faroese demands appear entirely unjustified: "The fact that Iceland and the Faroe Islands are now fishing huge quantities of mackerel is a case of free-riding on other states conservation efforts"⁶². The only conclusion I can draw from this is that the Faroese attempts at restructuring the game have been unsuccessful.

The most recent round of talks was held in Oslo in March. No agreement was reached but according to the Icelandic Head of Delegation the talks were held in a constructive atmosphere⁶³. The Norwegian Head of Delegation commented that the parties had only been 10-20% away from an agreement on the distribution of the mackerel quota. He added that the positive tone in part was a result of the Icelanders having relaxed their positions somewhat.

However, the positive feeling quickly waned later the same month when the Faroese authorities declared a unilateral quota for 2011 "limited to 150,000 tons". So if Iceland during the Oslo meeting took steps to expand its win set, the Faroe Islands, by means of this declaration, took the opposite course of action. According to the Faroese Ministry of Fisheries "This catch level is a clear reflection of the status and legitimate interests of the Faroe Islands as a major stakeholder in the Northeast Atlantic mackerel

⁶¹ Interview with official of the Norwegian Ministry of Fisheries and Coastal Affairs in Oslo on 3 January 2011.

⁶² Interview with official of Directorate-General for Maritime Affairs and Fisheries in Brussels on 4 May 2011.

⁶³ Fiskeribladet Fiskaren on 14 March 2011: "Makrellen ikke i boks" ("The mackerel conflict still not resolved" – my translation).

stock³⁶⁴. It is furthermore commented that the Faroe Islands are committed to working towards the aim of a transparent multilateral management of mackerel.

There does not seem to be any willingness on the part of the EU and Norway to go into discussion with the Faroese authorities based on this claim, which hardly can be classified as a "reaching out" gesture. According to a Norwegian fisheries official "the Faroe Islands are no longer negotiating, only putting forward demands"⁶⁵.

What about sustainable management and the mackerel conflict? The fact of the matter is that all four parties play the conservation card, but no one seems willing to reduce own demands. Neither the two allies Norway and the EU, nor the two contestants Iceland and the Faroe Islands, are willing to take decisive steps in this direction. This is a paradox given that all four parties subscribe to modern principles of sustainable utilization of natural resources and have ratified relevant international conventions in this area.

A feature which has characterized the conflict is mutual accusations of reckless behavior: since the very beginning of it the EU and Norway have labeled the Icelandic and Faroese catches "unregulated" and "irresponsible" with a huge potential to harm the state of the stock. Iceland and the Faroe Islands on the other hand, have claimed they have been excluded from real negotiations and forced to take unilateral measures. They add that this is done with the hope that the other two actors take Icelandic and Faroese shares into account in their quota decisions "with the view that the total mackerel fisheries would not exceed the recommended level"⁶⁶.

5.7 Summary

In this chapter I have applied Putnam's two-level games on the mackerel conflict in a situation of non-overlapping win-sets. The first thing I did was to elaborate on the

⁶⁴ Faroese Ministry of Fisheries (April 2011): "International Management of Northeast Atlantic mackerel". Information Memorandum/web article. Accessed on 7 May 2011.

⁶⁵ Interview with official of the Norwegian Ministry of Fisheries and Coastal Affairs in Oslo on 2 May 2011.

⁶⁶ See for example Icelandic Ministry of Fisheries and Agriculture on 20 December 2011: "Decision on Iceland's Share in Mackerel Fisheries in 2011". Press release/web article.

negotiations process. I then proceeded to defining the Level II constituents. An important finding was that the interests of the pelagic fishers exercise considerable interest over the positions of the four parties. In a scenario characterized by short-sighted pursuit of economic interests this implies small win-sets. No other interest groups appear to have any real say in the countries' domestic sphere: this was the case in the Faroe Islands, which relies on the fisheries, as well as in Iceland and Norway, where other industries are far more important. A case in point is the EU which has few mackerel fishers in relative terms, but where the constituents represented by these fishers are politically important.

As regards political institutions in charge of the negotiations I found that the fisheries authorities are in the driving seat even though there may be formal links to the foreign ministries, or obligations to consult with parliamentary bodies. The primacy of the fisheries authorities reduces the influence of non-fishing interests and may be conducive to small win-sets.

I then proceeded to the strategies of the negotiators, where our main emphasis was put on the communication of the negotiating institution and the various attempts to restructure the game and influence the other parties' win-sets. The findings show that it is in particular Iceland and the Faroe Islands – the contestants if you will – which have made use of these strategies to gain acceptance for their policies, which is to expand the win-sets of the EU and Norway. These attempts have not been successful as Norway has introduced a landing ban and the EU has threatened to introduce sanctions.

The Icelandic and Faroese responses have been to claim even higher quotas. These reactions reflect the power of the involved Level II constituents in the two countries. Although all parties subscribe to sustainable management policies the present atmosphere in the mackerel conflict is marred with mutual accusations of irresponsible behavior.

6.0 DISCUSSION

In this chapter I will discuss the findings of the previous chapter in more detail. An important part of this exercise will be to assess whether Putnam's two-level model gives a satisfactory basis to answer my research question. In this discussion I also intend to make use of the lessons provided by Hardin's the tragedy of the commons.

In the second part of the chapter I will discuss some future scenarios and possible solutions with respect to the mackerel conflict. Even though the situation today seems pretty hopeless previous experience shows that co-operation can emerge when the stakes of a conflict exceed acceptable levels.

6.1 Discussion of the findings provided by the two-level model

The research question of this thesis is "why are the European Union, Norway, Iceland and the Faroe Islands unable to agree on a distribution of mackerel that is acceptable to all parties?". Or, to put it in Putnam's terminology, what is the reason why the win-sets of the EU and Norway do not overlap with those of Iceland and the Faroe Islands?

Based on the findings in chapter five it seems that the setting of the mackerel conflict is conducive to small win-sets. It is obvious that the win-set of the smallest actor, the Faroe Islands, was small already in the beginning of July 2010, when the country's authorities said they were forced to leave the costal state agreement. Subsequent Faroese steps, in particular the decision to increase the unilateral quota to 150,000 tons in March 2011, decreased the win-set even further. Our findings indicate that these steps are related to the influence of the fisheries sector, most notably the vessel owners of the pelagic fleet. The interests of the pelagic fleet appear to have primacy over the interests of other parts of the fisheries sector. This is the only reason which can explain why the Faroe Islands seem unwilling to renew the annual bilateral quota agreement with Norway, which includes cod and other species. For the affected Faroese cod fishers the absence of an agreement is having severe negative effects⁶⁷.

Iceland and the Faroe Islands have made several futile attempts to change the other two parties' perceptions of the reasons for the conflict. However, the attempts have merely bolstered EU and Norwegian positions and spurred threats of retaliation.

The motives of the largest actor of the game, the EU, are somewhat puzzling. With a total population of more than 500,000 million people, the fate of some few thousand fishers in Ireland, Scotland and some other peripheral areas will hardly have any effect on the overall economy. Yet, the two-level game shows that there are powerful constituents with an interest in mackerel on the Union's Level II, and that it is politically impossible to ignore them. One explanation why these constituents are seemingly "punching above their weight", may be related to general skepticism towards the EU in some of the affected countries, in particular in the United Kingdom. The Union depends on legitimacy to operate effectively, and one way of achieving legitimacy is to stand up for the constituents which are not always convinced of the merits of being a EU member.

What if these constituents were weaker, would the EU then have a softer stance in the mackerel issue? According to Putnam's model the answer would be yes. However, it cannot be excluded that there are also interests at stake that I haven't detected in my analysis. For example, even if there were little pressure from the Union's fishers it would be unlikely that the EU would accept to be "pushed around" for a long time by a tiny island state like the Faroe Islands. Any country, also the EU, needs to defend its boundaries and position in the international system.

When it comes to Iceland the win-set has never overlapped with those of the EU and Norway. Again the importance of the fisheries sector is crucial for our understanding of the country's course of action. However there is one element pertaining to Iceland

⁶⁷ Fiskeribladet Fiskaren on 8 April 2011:"Taper på makrellkrigen" ("Losses due to the mackerel war" – my translation). According to the article Faroese cod fishers stand to lose millions due to lost access to Norwegian fishing grounds in 2011.

that appears to be insufficiently dealt with by the two-level model: the application for EU membership which was submitted in 2009 after the economic melt-down the year before. In my findings there are no indications that the Icelanders connect the question of EU accession to the mackerel issue. In the EU on the other hand, we have seen that the Commissioner for Maritime Affairs and Fisheries has tried to create such a connection.

It is natural to expect that the application was based on an analysis of costs and benefits of membership and that the Government concluded that the latter most likely will outweigh the former. It therefore seems logical to ask the following question: if the Icelandic Government has serious intentions about EU membership, why does it antagonize the Union in the mackerel issue? If Iceland really needs EU membership, wouldn't it be better to have a larger win-set in the negotiations and reach an agreement?

As we know this has not happened. In fact, to judge from the country's positions it seems as if Iceland is negotiating from a strong position and not as a country which nearly avoided bankruptcy. In my opinion this seemingly peculiar position can be best explained by the low likelihood of Icelandic membership. It has been decided that the issue of EU accession will be the subject of a public referendum when the accession agreement is ready. Since opinion polls over time have shown that a clear majority of the Icelanders are against joining, there are really no reasons for the negotiating institution to pretend that the country will become a member. So why take a softer stance in the mackerel talks with the EU?

Norway is far less dependent on the mackerel incomes than the Faroese Islands and Iceland. The two latter countries therefore have higher constraints and thereby a bargaining advantage, *ceteris paribus*. The Norwegian fisheries sector is far from insignificant, but the big values are found in other species such as farmed salmon. Besides, the parts of the country that are politically sensitive when it comes to the fisheries are the three northernmost counties. Few mackerel fishers are found in that part of Norway.

Nevertheless, the mackerel has a certain importance in Norway and the findings in chapter five strongly indicate that the authorities are committed to defending the interests of the mackerel fishers. In September 2011 local and regional elections will be held, and it cannot be excluded that the mackerel conflict will be on the agenda in some areas. This may result in more lobbying towards the Government by the pelagic fishing associations in the coming months. We know that any change in the allocation has profound economic consequences for the fishermen involved in a particular fishery and this gives them a strong incentive to influence the distributive outcome (Asgeirsdottir 2008:142). Any lobbying will aim for upholding the pressure and maintaining positions, i.e. to avoid an expansion of the Norwegian win-set. In order to not lose quotas it is crucial for the sector interests to constantly exercise pressure on the authorities, because as one fishery official laconically put it; "We are not negotiating for ourselves"⁶⁸.

Has Putnam's model all in all given us satisfactory answers to the question I posed in the thesis' introductory chapter? I have undoubtedly gained valuable insights into the reasons why the four parties are unable to agree on an agreement for the mackerel. The two-level model is useful in this regard as it gives an analytical tool for assessing the impact of domestic constraints and considerations on the developments of the mackerel negotiations. However, it would be desirable to "dig a little bit deeper" with respect to the underlying social dynamics which prevent co-operation from emerging. It therefore seems justified to see if Hardin's model can complement our understanding of the matter at hand.

6.2 Hardin's model revisited

The North Atlantic is vast and in practice it is difficult to control or restrict access to many of the fishing banks. To implement an effective and strict regime of access control would be extremely costly in terms of monitoring and surveillance resources. This is particularly true for the international waters. With regard to the countries' EEZ, where the greater part of the mackerel is captured, the home country has, according to

⁶⁸ Interview with official of the Norwegian Ministry of Fisheries and Coastal Affairs on 2 May 2011.

international conventions, exclusive rights to the resources. However, these rights may conflict with other international legal instruments such as regional fishery agreements.

The point here is not to embark on a discussion of which legal instrument should have primacy over the other, but rather to underline that there is no way, at least no *physical way*, that other countries can exclude the home country from harvesting a resource within its waters. In other words: the EU and Norway cannot exclude Faroese fishers from fishing mackerel inside the Faroese EEZ. As we learned in chapter three this property of the mackerel stock is referred to as non-excludability.

If Norwegian fishers catch a substantial amount of North East Atlantic mackerel the amount available to the fishers of the other countries will diminish. Hence, one fisher's "use" of the mackerel will have consequences for other fishers. This property of the mackerel is referred to as rivalness of consumption. Taken together, non-excludability and rivalness of consumption make North East Atlantic mackerel a *common pool good*, which are susceptible to "a tragedy of the commons".

In chapter three I presented the view that Hardin's model may be a useful analytical model rather than an empirical representation, and that the tragedy of the commons should be regarded as an "ideal-type" tragedy which can be a helpful tool for comparison with real world situations. How does this fit our findings?

As the mackerel conflict stands today the usefulness of Hardin's insights seem to go beyond those that follow from a simple application of an analytical model. As noted earlier the advice of ICES with regard to the TAC for mackerel in 2011 is 646,000 tons. In stark contrast to this figure we have the sum of the quotas of the coastal states and the unilateral quotas of Iceland and the Faroe Islands, which altogether amount to 942,818 tons. So, if no agreement is reached and the fishermen find the mackerel, this is the volume that will be removed from the stock this year, a volume that is 46% higher than the recommended level. There is little doubt that the way things have evolved the mackerel fishery may be heading towards a tragedy of the commons. The extent of the tragedy will depend on many factors. The mackerel is a fast growing and short-lived species with a relatively high resilience. If the overfishing only goes on for a short time, say for a year or two, and the natural conditions create a good basis for a couple of strong year classes, the damage to the stock may not be that large. On the other hand, if the overexploitation lasts for years, in combination with weak year classes, the impact on the stock may be serious and long-term.

In Hardin's article the solution to the problem was some kind of coercion, to make the actors break out of their selfish and narrow-minded behavior. The kind of coercion should be mutually agreed upon by the majority of the people affected. It is evident that I cannot extrapolate this solution to our case. The EU, Norway, Iceland and the Faroe Islands are four sovereign actors as far as fisheries are concerned, and there is no overarching international structure with the power to impose a solution.

If all the players were members of the EU there would have been structures and procedures in place to work out a solution with the potential of avoiding overfishing, but in light of the foreign policy priorities of Norway and the Faroese Islands this scenario is pretty remote⁶⁹. Another way of "solving" the problem would be that the bigger actors forced the smaller actors to comply with the formers' priorities, for example by means of sanctions. However, as we have seen the measures taken so far appear to have zero effect on Icelandic and Faroese policies.

Could there be any useful insights to gain from the critics of Hardin's model, for instance those who believe that the users' inherent interest in sustainable utilization of the resource is a basis for co-operation? The point merits consideration as it is an undeniable fact the users in this conflict, the fishers, have a fundamental interest in preserving the mackerel stock for the years ahead. If the stock gets depleted it is the fishers and their families who will be hardest hit. The common interest in the future of the stock should therefore, in principle, be a convincing reason to work together. So why does such co-operation fail to emerge?

⁶⁹ Critics of the Common Fisheries Policy (CFP) of the EU would here take the opportunity to highlight examples of unsuccessful CFP management in the past.

It should be noted that a kind of co-management is difficult to imagine as this concept usually is associated with local communities where the inhabitants have much closer relations than in the case of fishers dispersed in four different countries. A more fruitful way of answering the question is probably to consider the problem of freeriding: why should I take responsibility for preserving the stock, in other words reduce my catches, when the other fishers just keep on fishing? In essence, free-riding was the worry of the fishery official of DG MARE with respect to the quota increases of Iceland and the Faroe Islands. His view was that their unilateral quotas were a kind of free-riding on the conservation efforts of the other actors.

An interesting question to ask at this stage is how the stalemate represented by a tragedy of the commons situation can be "unlocked". Given the small win-sets of the involved players there is currently not much reason for optimism. A less pessimistic view would be to hope that previous experiences of overfishing and depleted fish stocks at some point will make the actors realize the full consequences of the excessive quota demands, and force them back to the negotiations table.

6.3 Possible future scenarios

The implications of the current stalemate in the negotiations are rather gloomy. Massive overfishing seems imminent, and once again it is demonstrated that despite all kinds of (theoretical) commitments to sustainable management, states are not capable of sharing a natural resource in a responsible manner. At the end of the day shortsighted perceptions of economic gain prevail over long-term preservation of an important resource.

In the following I intend to elaborate on three possible scenarios for the mackerel conflict: a depletion scenario, an overfishing scenario, and a sustainability scenario.

The depletion scenario

The depletion scenario is the most pessimistic of the three scenarios. Its point of departure is that the Faroese decision in March 2011 to increase the unilateral quota to

150,000 tons has set the standard for the whole negotiations process. This means that any new initiatives in the time ahead will have a negative rather than a positive connotation. The preconditions for this scenario are than the pelagic fishers maintain or increase their decisive influence over negotiations positions in Norway, Iceland and the Faroe Islands. If the mackerel is perceived as essential in the creation of jobs their influence will increase, especially in the Faroe Island, where the fishing companies access to quotas have a direct impact on the overall local employment opportunities⁷⁰.

With the prospect of 46% overfishing of the recommended TAC in 2011, the EU will impose sanctions against Iceland and the Faroese Islands. The sanctions will be stricter than the Norwegian landing ban on mackerel introduced last year and possibly include a general ban on all Faroese and Icelandic landings in EU ports.

As the conflict continues on an escalating trend in the second half of 2011, ICES Advice for 2012, normally made public in the beginning of October, will paint a negative picture of the state of the stock and recommend a reduction of the TAC. Although all parties will point at the recommended TAC and underline their commitment to responsible measures, no one will make concessions. The EU and Norway will as in previous years focus on the importance of the coastal state agreement and reserve the bulk of the TAC for themselves, based on the long-term bilateral management plan. Iceland and the Faroese Islands will set unilateral quotas similar to the levels of 2011. The result is another year characterized by severe overfishing.

Throughout 2012 there will be contact between the parties with a view to reach an agreement for the distribution. However, the parties are now so antagonized that nobody is willing to compromise. There will be frequent mutual accusations of irresponsible behavior and the conflict on mackerel will impact negatively also on a range of other fisheries agreements, possibly causing their cancellation or suspension.

⁷⁰ See for example Dimmalætting on 12 April 2011: "Bjóða arbeiðspláss aftur fyri makrelkvotu" ("Offers jobs in return for mackerel quotas" – my translation). Web article. According to the article a Faroese vessel owner says he can offer 180 local jobs if he gets quotas of 25,000 tons of mackerel. He claims this would imply a 9% decrease in the country's unemployment rate.

In 2013 the stock is so depleted that the fishers have difficulties locating the fish, but as mackerel prices are high in the international market the race for the fish continues until the stock and profits literally vanish. At this point the parties manage to agree on a future distribution of the TAC, but it is evident that it will take at least a decade to build up the stock.

The overfishing scenario

In this scenario the stock is not depleted, "only" overfished. The starting point is similar to that of the previous scenario and both 2011 and 2012 will be characterized by too high catches. However, in the second part of 2012 it becomes evident that there is less fish around. In addition, the economic sanctions imposed by the EU are starting to have a serious impact on the Icelandic and Faroese economies. Especially the Faroese Islands are feeling the pinch and the authorities begin to realize that they have to reconsider their policy. The two island states request a new round of talks and say they are willing to reduce their demands. After tough negotiations an agreement is reached whereby Iceland and the Faroese Islands get significant shares of the TAC. However, the bulk of the quota is still shared between the EU and Norway.

In this scenario the mackerel stock will be severely overfished and ICES will propose that some important mackerel areas should be closed for the time being. However, the stock has not been reduced to levels that seriously damage its long-term condition. The recommended TAC will be low for a number of years, but provided that no overfishing occurs the stock will be back at healthy levels within five years.

The sustainability scenario

This is the more optimistic scenario of the three and anticipates that the developments during the first half of 2011, not least the unilateral Faroese quota increase, will make the involved parties realize that urgent action is required. Norway will take the initiative to a new round of talks in the early autumn and will, after consultations with the EU, show more flexibility than in previous rounds. Iceland, which showed willingness to expand its win-set in March, will continue in the same fashion and make

some additional concessions. The Faroese Islands realize that the conflict has the potential to create more damage than gain. An indication of this materialized on 13 April 2011, when a Faroese fishing company's application for environmental certification by Marine Stewardship Council (MSC) was rejected⁷¹.

After a couple of difficult negotiations meetings during the autumn, they finally agree on a new coastal state agreement for mackerel that is acceptable to all parties. ICES advice continues to be the basis for the agreed TAC. The distribution of the quota gives Iceland and Faroe Islands significant portions whereas the EU and Norway, in particular the latter, accept reductions. With this arrangement the TAC for 2012, somewhat reduced compared to 2011, is in line with the advice by the ICES scientists, and the mackerel stock continues on a high level in the following years.

A comment on the scenarios

It must be underlined that these scenarios are entirely hypothetical, but hopefully they can serve as "lines of thought" as to where the development could be heading in the coming years. It is hard to say which scenario is more likely. To judge from the rather pessimistic attitude expressed by the fishery officials who have been interviewed, it would be tempting to say that the sustainability scenario is unrealistic. The depletion scenario on the other hand, is both extreme and pretty distrustful of the parties' commitment to sustainable management, but given the current circumstances it cannot be entirely rejected. Still, the overfishing scenario probably represents a "middle ground" with a higher likelihood of becoming real than the other two.

A lot of factors will influence the way ahead in the mackerel conflict. For example, if the mackerel migration patterns again changes, either back to what they used to be or in a new and unexpected fashion, this will have a direct impact on the negotiations. In a two-level perspective such changes have the potential to alter the power and influence of domestic actors.

⁷¹ TheFishSite.com on 13 April 2011: "Faroese Mackerel Fishery Exits MSC Programme". Web article.

6.4 Summary

In this chapter I have discussed the findings of our analysis of the mackerel conflict. A central concern was whether the theoretical framework I employed in our study, Robert Putnam's two-level model for international negotiations, was fruitful in terms of answering our research question. The discussions revealed that the model yields several insights into the reasons why an agreement on mackerel has not been concluded. One such insight was that the domestic groups that will be most affected by the outcome of the negotiations exercise decisive influence. This was evident also in the EU where the affected constituents, relatively speaking, represent small economic interests.

To get a better understanding of the underlying social dynamics preventing cooperation, I elaborated on Hardin's tragedy of the common in the context of the mackerel conflict. I found that the model is a fairly good representation of the current difficult situation.

I the last section I depicted three different scenarios for the way ahead: the depletion scenario, the overfishing scenario, and the sustainability scenario. I concluded that the second scenario appears to be the most likely one.

7.0 CONCLUDING REMARKS

The exploitation of commercially important fish stocks straddling political boundaries in the ocean entails serious distributional challenges to interstate co-operation. The allocation of economic values associated with a shared resource is complicated in itself, but in fisheries it is of vital importance that the management decisions also take long-term sustainability concerns into account. Since our knowledge of the dynamics of the species' biological parameters will never be complete, these decisions have to be made against a backdrop of uncertainty. This is not an unfamiliar feature in fisheries management. However, the distributional challenge becomes acute when the species of interest, the North East Atlantic mackerel, seems to be changing its migration patterns. In theory there exist powerful incentives to facilitate co-operative management in fisheries as the absence of it all too often leads to depleted stocks, but it remains to be seen if these incentives will prevail in the mackerel conflict.

In this thesis my intention has been to examine recent initiatives and actions by the European Union, Norway, Iceland and the Faroe Islands with respect to the mackerel conflict. In this conflict the EU and Norway have similar standpoints as they both defend the merits of the old coastal state agreement. On the other side of the table we have Iceland and the Faroe Islands, the contestants, claiming that new developments must lead to new management rules. Although all four parties subscribe to the principles of sustainable management, they have so far been unable to forge a new agreement and a distribution of the TAC that is acceptable to everybody. In fact, if we add up all the quota demands for 2011 we will be facing a situation where the actual catches exceed the recommended level by 46%. The main objective of my analysis was to uncover the reasons for this worrying situation.

The analytical tool I employed to this end was Putnam's two-level model for international negotiations, which proposes a structured way to study how domestic actors act to influence and constrain negotiations between states. This choice of analytical tool appeared justified given that the distribution of the TAC of mackerel will be decided in negotiations between the four parties. However, as lack of cooperation with respect to a common natural resource is at the core of my problem definition, it made sense to also present important insights derived from Hardin's study of the tragedy of the commons.

An important finding was that the interests of the pelagic fishers have substantial influence of the four parties' priorities and positions in the negotiations. These groups effectively enjoy veto power over the outcome of the negotiations, a fact that was particularly evident in Iceland and the Faroe Islands, the two countries with highest dependence on the fisheries sector. Also in the EU the mackerel fishers and their allies on member country level, most notably in Scotland, enjoy decisive influence. Their influence is first and foremost related to political concerns as the economic impact of the mackerel fishery in the EU, in relative terms, is negligible. In Norway the mackerel fishers dominate the country's positions, but in a context of low unemployment and good economic prospects in other sectors, there is no guarantee that they over time will be able to mobilize consistent and large political support.

Another interesting finding was that the attempts to increase the opponent's costs of no-agreement, for example Norway's landing ban on Icelandic and Faroese mackerel, or EU's threats to introduce sanctions, seem to have little effect. The same can be said about the Icelandic and Faroese endeavors to alter the EU and Norwegian perceptions of how the new migration pattern have affected the issue of where the stock belongs.

The fact that the parties' win-sets appear to be small does not bode well for the prospects of an agreement. Or rather: as the matter stands today there are few indications that substantial over-fishing can be avoided. In many ways the situation bears resemblance to the tragedy of the commons. If such a scenario materializes it would not be the first time neighboring countries prove unable to co-operate on the management of a scarce natural resource.

In past conflicts over shared stocks or access to stocks between Norway and Iceland, the pattern has been that the smallest and most fishery dependent country of the two, Iceland, has achieved the best deal (Asgeirsdottir 2008). It is too early to say how the mackerel conflict will unfold in the time ahead, but being small and heavily dependent on fisheries will normally be a bargaining advantage because the negotiators are more constrained by domestic actors and concerns than their counterparts from the bigger states. It should not be excluded that the solution to the mackerel conflict, and hopefully a resumption of responsible management of this important resource, will emerge in a similar way.

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