

Allocating Quotas and Limiting Access
- an approach to management
The case of the Norwegian Mackerel Fishery

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by
Mona Sand



Norwegian College of Fisheries
Institute for Social and Marketing sciences
University of Tromsø
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Abstract

The mackerel fishery has become the most important pelagic species for export. Prior to 1994 the allocations between the three main fleet groups, the purse seine, the coastal and the trawl fleet was negotiated on an annual basis. 1994, was an important year for the fisheries industry, the price subsidies were no longer appropriate after the implementation of the EEA agreement. A stronger focus on economic efficiency and the need for stability, political and economic, called for a more stable allocation of the quotas. The Norwegian Fishermen's Association has been instrumental in the process of finding an acceptable Allocation key. However, the processes have been turbulent and critical for the Norwegian Fishermen's Association. The authorities followed the key more or less, the advice from the Norwegian Fisherman's Association weights heavily in the management system. The notion that participation in the decision-making process yields legitimacy is central to understand the emphasis the authorities have laid on the compromises. However, the notion of the legitimacy of the procedure may be questionable. The representational share of the different interest groups in the Norwegian Fishermen's Association is under debate. Furthermore, through a series of events the coastal mackerel fishery was in 2002 regulated by limited access for all vessels. The limited access must be understood most as an economical regulation, however behind this regulation strong interests have played a significant role. Co-management within the "family" will hence concentrate on a long-term allocation, which is now determined for the next 7 years. But whether this is perceived as legitimate in the wider circles of stakeholders is still open for debated. The issue of payment of resource rent is pending. Stable conditions, in particular political, may therefore be something of an illusion, even if the annual allocation battle is now history.

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Chapter 1: Introduction

Introduction	1
Objective and Problem definition	1
Delimitation of the thesis	2
Methodical considerations	4
Thesis Outline	7

Chapter 2: Theoretical aspects

Introduction	9
Legitimacy and Participation	10
Principles of Representation	14

Chapter 3. The Background

Mackerel, its biology and stock development	17
The Fishery	19
Formal Organisation of Representation	24

Chapter 2: The 1994 Allocation Key

The 1994 Resource Allocation Report	27
The Resulting Allocation Key	35

Chapter 5: The 2001 Allocation Key

The Experience from 1994	37
The 2001 Report from the Resource Allocation Committee	40
The Resulting Allocation Key	44

Chapter 6: From Open Access to regulated Access in the Coastal Mackerel Fishery

The Development in the Coastal Mackerel Fishery	47
Positioning	48

Chapter 7: Summary and Discussion

Summary	52
Discussion	55
Concluding remarks	58

References

Chapter 1: Introduction

Introduction

It is a trend in several highly developed fisheries that national quotas are allocated as ITQ's (Individual Transferable Quotas) (see for example Hannesson, 1994). However, in Norway this management model has been resisted (Hersoug, Holm and Rånes, 2000). But even if ITQ's have been resisted in the Norwegian context, the ideas of allocating quotas between individual vessels and between fleet segments is an established practice in the most important fisheries in Norway. Limiting the access to the fisheries has, in parts of the fleet segments, also become an established, accepted and even requested development. The principle for the allocation does not differ from the proposed ITQ (Individual Transferable Quotas) system; it is based on historical rights. Some authors addressing the theme of regulations and management directions would regard these as the outcome of a series of events and compromises to the changing needs and challenges in the fisheries (See Jentoft and Mikalsen, 2001). Thus, understanding the processes leading towards the allocation keys and the limiting access to the mackerel fisheries may be understood in the context of the history of the fishery. The need for management of the Norwegian mackerel fishery follows the development in the fishery. The approach to management decision procedures however, may be more relevant when it comes to the preferred models of management. The approach to management decisions in Norway is through processes of extensive consultations with the industry. The tradition is that the Norwegian Fishermen's Association has had a dominating role. The world has changed since the early start of the large-scale mackerel fishery in the beginning of the 1960's; directions of management strategies do not develop in isolation. Why the allocation keys were introduced and the resulting allocations together with the limited access must be understood according to the developments through history, the approach of co-management and prevailing political climate.

The objective and the problem definitions

The objective of this thesis is to better understand the processes behind the current allocation key and the closure of the coastal mackerel fisheries.

By reviewing the history of the mackerel fishery from the early 1960's and general developments of relevance for Norwegian fisheries management I hope to better understand why and how the allocation keys were constructed and why the mackerel fishery was finally closed. By answering four directed questions about regulations of the mackerel fishery I aim to better understand the implications and the nature of management and co-management in Norwegian fisheries.

Why were the allocation keys introduced first in 1994 and then in 2001?

Why did not the authorities follow the proposed keys?

What were the results in terms of actual allocation and catch?

Why was the mackerel fishery closed for the coastal fleet?

Delimitation of the thesis

In order to make the thesis tangible and manageable, it is necessary to limit the extent and depth of the analysis. The limitations made should not however exempt factors that are of importance in bringing clarity to the theme and limit the means of fulfilling my objective.

With regards to the size of the Total Allowable Catch (TAC) available for the Norwegian fleet, this is dependent on both the scientific advice and results of international negotiations. The work of and advice of the ICES (International Committee for the Exploration of the Seas), North East Atlantic Fisheries Commission (NEAFC) along with the different bi- and multilateral agreements on international level are not of specific interest to this thesis. Thus the international side of the allocations are largely excluded. Instead I will only note that the Norwegian quota varies as a result to this.

The thesis will focus on the development of the mackerel fishery and the regulatory measures that are related to allocations and limiting of access. There are several regulatory measures that are relevant in the mackerel fishery, but in meeting my objectives it is not necessary to go into the details of all regulations. Furthermore, the allocations of quotas are also divided into maximum quotas, vessel quotas and group quotas. The maximum- and vessel quotas are not of specific relevance for this thesis; it is the main group quotas that will be the focal point in this regard. Group quotas are divided into sub group quotas also. I shall however maintain a focus on the larger picture in which

I will mainly differentiate between the offshore purse seine fleet, the trawlers and the coastal fleet. However in the chapter of limiting access in the coastal mackerel fishery it is necessary to differentiate between the different sub groups.

The allocations between the main different fleet segments may be analysed with regards to bargaining power of specific groups; individuals have at times considerable influence. However, the specifics of the individual (group) resources, strategies and objectives are not analysed here. Thus the discussions are based on outcome and process analysis, and trying to determine in retrospect factors that have been influential. The settlements in form of the allocation keys and the limiting of access are considered to express group interests and motives, based on generalisations to the parties' points of view and priorities. Furthermore, I will limit my analysis to be concerned with the major fleet groups and the authorities. In addition, the locus of the analysis is on the national level, implying that regional and local authority and county organisations' actions and positions are not of special interest. However, as the allocations between the different fleet segments have regional implications due to distributional patterns of vessel types, it may occasionally be relevant to relate interests regions. The interests of the onshore producers and sales and export organisations are not emphasised. The main focus will be on the harvest side of the industry. This is not only an expression of where the issue of allocations is most pressing but also that the priorities of the onshore side are more related to availability of raw material and to quality. The allocation of quotas is mainly an output control, and limiting of access is mainly an input control both aimed at the harvesting activity. As we are not speaking of major redistributions, the onshore activities are likely not to have strong objections nor have I found any indications that they have.

Because the regulations are considered as outcomes of history and the approach of co-management, different arenas and channels have been and are available. The Regulatory Council and the annual meeting of the Norwegian Fisherman's Association are major arenas where interests are articulated through representation. The structural properties of these arenas and prerogatives to representation and authority are not elaborately described. Rather, the organisation of the decision-making system is outlined.

Methodical Considerations

Data and method

The purpose of this section is to give a description of how and where the data is collected and to discuss properties of the method chosen. A requirement of all scientific studies is that the results allow for scrutiny.

Method is a tool, a procedure from which problems are solved and new insight achieved (Holme and Solvang, 1996; 14). According to Hellvik (1991; 15) certain central norms apply if a method is appropriate for studies in social sciences. These are: 1. That the result of a study is supported by evidence in reality. 2. That the collection of data is systematic (in order to avoid bias). 3. An accurate use of data (in order to secure reliability). 4. An effort to eliminate prior perceptions. 5. To present the results which allows for scrutiny, control and critique. 6. That the result must open for new knowledge.

These are rather extensive criterions, especially when it comes to a relative limited sized thesis, but it is useful to keep these criterions in mind.

The choice of method is directed by the objectives and the problems defined (Holme and Solvang, 1996). That is that the method used depends on the stated objective and the research questions. In approaching my objective and the nature of the research questions it is natural to choose a method that follows the principles of historical methods. Such is the method of document analysis (Holme and Solvang, 1996). This means that data are collected from written records that are part of an historical whole (Holme and Solvang, 1996). Data that are relevant to these questions are available as both qualitative and quantitative data records of history.

The method used in this thesis may be characterised as a qualitative method, implying that the objective is primarily to increase the total understanding and not to test the validity of data (Holme and Solvang, 1996; 15). There are both strengths and weaknesses related to the use of methods. A strength of quantitative method is that it opens for a more complete understanding of social processes and systems, furthermore qualitative investigations are characterised by flexibility which allows for a less rigid approach to the. A weakness may be related to how data are collected which may make comparisons more difficult problem. Furthermore, a qualitative approach to the data may yield interpretations that are less

unvaried (Holme and Solvang, 1996). Relevant then is the question of where to collect these data.

Material for this analysis was collected primarily from public documents available, such as reports from the Norwegian Fisherman's Association, the Directorate of Fisheries, the Department of Fisheries, secondary literature review and newspaper articles. Thus, the data was gathered by document analysis. Analysing the documents requires a clear reflection over the quality of the data, and being aware that statements may be normative and cognitive (Holme and Solvang, 1996). A benefit from using numerical data is that they more readily qualify as being neutral. However, I did observe some differences in the numbers used. The problem of neutrality is not only related to data, but also for use in the theoretical perspective. Theories often have a normative origin (Østerud, 1996).

Some quantitative data is presented and is collected mainly from public statistics on from the Stortingsmelding 51 (Fiskeridepartementet, 1998) In addition Pehrson and Ramsli (1998) collected a considerable amount of quantitative data in their master project. Their data is collected from official statistics of the Central bureau of Statistics (SSB), the Herring sales organisation (Norges Sildesalgslag), the Directorate of Fisheries and the Fiskeridepartementet (1997-98 St. meld 51). I use statistics from various sources, all duly noted. Most of the statistics have been controlled against the primary sources, but all years have not been available. Though errors may occur, the main intention has been to show trends.

The most important documents concerning the allocation keys and the limiting of access are reports from the Norwegian Fishermen's Association. Depending considerably on secondary sources may be a weakness of this thesis, however development trends may substantiate the interpretations made. Evidence may be circumstantial, and thus requires efforts to interpretation. With regards to the last developments towards the 2001 allocation key, the debate was readily available in the newspapers, and thus may provide clarity to interests and motives of the different parties. All facts relevant to the allocations and the authority interventions were not available thus some interpretations of the outcomes is necessary.

Document analysis is a method in which the observations are made through written records. The problems faced with choosing such a method are mainly related to the sources. As sources reflect priorities and a selection of the data recorded, it is only part of a historical time. The ideal situation is when multiple sources are available, mutually independent, detailed and related written at the time of events by neutral, competent witnesses (Holme and Solvang, 1996; 130). Preferably the sources are primary, but the closer a source is to the problem and situation the more weight may be put on it (Holme and Solvang, 1996). Interpretation is an important part of document analysis, this means that the content and the objectives of the sender (originator) are analysed. However, prior to interpretations the characteristics of the source must be considered. These characteristics are related to whether the document is mainly normative or cognitive, whether it constitutes is an assessment, description, prediction or statements of programme (Holme and Solvang, 1996). Further, the relationship between sender and receiver will influence the appropriateness of the document to reveal the information that is requested. For example, public sources from institutional origin such as government reports may not be sufficient in revealing the processes behind a decision; more confidential sources such as internal working drafts will be more informative (Holme and Solvang, 1996). At this point, the documents that were available to me clearly exhibit a weakness, and thus I have to rely on secondary sources and to the extent the reports reveals sides of the processes.

Reflections over the role as a student

Choosing a theme for an analysis is based on perceptions of the phenomenon that catches ones interest (Holme and Solvang, 1996). And I, being relatively new to the area of social science studies have been almost blinded by the selection of theories that could have explanation force on the phenomenon of fisheries management. I must admit that my initial attraction to the theme may have been somewhat tickled by the normative statements from so many sources. Naturally, as a student of fisheries management one cannot escape reflecting over personal political preferences. In my defence, I claim that the process so far has lead my to become increasingly uncertain of my own preferences. Holme and Solvang (1996) speak of these normative and cognitive circles, the hermeneutical circles. These processes led to vast amounts of available theories and perspectives in social sciences that sometimes have been more confusing than

educational. However, taking on social science studies with a primarily natural science background has in the end hopefully given me new perspectives. I believe that this must be the objective of a multidisciplinary study such as the MSc in International Fisheries Management.

Thesis Outline

In chapter one the theme is introduced, and objective and problem definition specified. The method and data used and reflections over the course of study is reflected.

In chapter two, the theoretical aspects are addressed. In this chapter concepts related to co-management theory is presented. Emphasis is put on participation and representation related to stakeholder theory and the concept of legitimacy.

In the following chapter the background is presented through an introduction to the characteristics of the mackerel, an account of the history of the fishery, which exhibit the classical traits of biological and economical- over exploitation that leads to the beginning of the regulations. The formal organisation of the decision-making system within the Regulatory Council and the Norwegian Fishermen's Association is briefly sketched.

In chapter four, I start with an introduction where the reviewing the situation prior to the 1994 allocation, in order to set the allocation key within the context of time. In addition a brief presentation of what was discussed in 1991 for the prospects of long time allocation in the pelagic fisheries is in order.

This is followed by a closer inspection of the report in 1994, which was an analysis of principles and trade-offs related to the allocation, and a more specific review of the mackerel fishery and the pelagic fishery more generally.

In chapter 5, the allocation key is to be addressed. Starting with the experiences from the 1994 allocation key. Further, I analyse the development in actual quotas and catch, along with the price developments. At the end of this chapter the discussions prior, during and after the Annual Meeting in the Norwegian Fishermen's Association is presented as a

narrative in order to more precisely identify the interested parties (stakeholders). Finally the present allocation decided for the mackerel fishery is presented.

In chapter six, the development towards the limitation of access in the mackerel fishery is analysed.

Finally, the answer to the research questions are summarised, the observations are discussed in light of the theory, in the end some concluding remarks on the nature and implications to the Norwegian approach to management is made.

Chapter 2: Theoretical aspects

Introduction

The objective of this thesis was to better understand what lead to the allocation of quotas between fleet groups and the limiting of access in the coastal fisheries management. By posing four directed research questions I aim to find empirical evidence to be discussed. These findings are to be discussed within a theoretical framework related to co-management theory. I pose that the way the management setting is organised play a significant part in the actual outcomes from management. In addition history matters with regards to how the management system is organised. In this section I shall provide a theoretical framework in which the management of the Norwegian mackerel fishery may be understood.

Co-management is a vast concept related to options for management strategies. The definition by Charles (2001) may illustrate the main ideas however. According Charles (2001; 265) co-management may be defined as:

“ ...the creation and implementation of suitable management arrangements through which a set of agreed stakeholders, i.e. fishers and their organisations, work jointly with government to develop and enforce fishery regulations and management measures”.

The essential idea here is that stakeholders and government share decision-making and management functions. This implies that stakeholders have a stake in the fishery and in the management, that they share power with government when decisions are made and that they are co-responsible for the sustainability of these resources (Charles, 2001). Sen and Nielsen (1996; 406) offers another definition of co-management: “...an arrangement where responsibility for resource management is shared between the government and user groups”.

What constitutes as suitable arrangements and whom these stakeholders or user groups are is not self-evident. It is a democratic tradition that the parties effected by decisions should be heard, they participate. But direct democracy seldom practical, thus democracy by representation is the most common solution. I shall first address theoretical aspects of

legitimacy in relation to participation, followed by aspects concerned with the organisation of co-management with regards to representation.

Legitimacy and Participation

Introduction

A general hypothesis in co-management is that sharing responsibilities will make stakeholders more responsible, more inclined to perceive the regulations as legitimate and thus will act in compliance to the regulations (Jentoft, 2000 a), which will reduce the enforcement needs. But as Jentoft (2000a 144) claims legitimacy is: “ a premise and not only an outcome of a management system”

A low degree of legitimacy may basically lead to two reactions, one is to not comply (exit), and the other is to give the discontent a voice (Jentoft, 2000a). The type of reaction will depend on the existence of institutions that opens for communication (Jentoft, 2000a). Legitimacy is a complex principle that needs some closer presentation. According to Weber (1919) legitimacy is related to power relationships. But power must be perceived as legitimate, there must be a well-founded reason for those who hold power to limit the action of others (Jentoft and Mikalsen, 2001). The test of legitimacy according to Jentoft (2000a) is legality, but also rationality and reasonability. The sources of legitimacy are from custom, authority (charisma) or legality (Weber, 1919) and in his perspective the legitimacy of power is perceived by those affected by public policy (Jentoft, 2000a). Power may simply be defined as (Salanick and Pfeffer, 1977; 417): “ the ability to get things done the way one wants them to be done...”. In the previous section it was implied that co-management is the sharing of power between government and stakeholders (Charles, 2001). As fisheries management regimes (system) are based on power, to whom this power should be allocated is therefore relevant. This is related to stakeholder theory presented under the section of participation.

Legitimacy according to content and procedure

According to Jentoft and Mikalsen (2001) the content of the regulative system may be perceived as what yields legitimacy. This implies that legitimacy fulfils some pre-established standards and demands (Jentoft and Mikalsen, 2001). Thus, the systems legitimacy is weighted against notions of what is considered rational, reasonable and just

for those who are subject to the regulations. According to Jentoft and Mikalsen (2001) there are three reasons why persons affected by regulations or management measures will follow the regulations; the fear of being punished, respect for the law, that the regulations are well founded. Legitimacy is related to the two latter, as the fishermen will feel compelled by rational and or moral reasons to follow the regulations (Jentoft and Mikalsen, 2001). Therefore, as legitimacy may be considered as dependent on belief systems and is therefore subjective and normative.

Legitimacy may also be perceived from the manner in which the regulations are decided, procedure legitimacy (Jentoft and Mikalsen, 2001). A management approach that may be termed instructive, the process is that the authorities or government informs the affected parties (or users) of their planned decision (Sen and Nielsen, 1996). This constitutes as a so-called “top-down” decision making process. And by definition does not constitute as co-management. Alternative process approaches lie in what may be termed “bottom-up” (Jentoft and Mikalsen, 2001). The degree of information exchange and participation in the decision making process may be illustrated according to the “imaginary ladder of participation”¹ (see for example Charles, 2001; Sen and Nielsen, 1996). This implies that the fishers have the opportunity to discuss and make suggestions to how the regulations should be. These two types of legitimacy, content and procedure maybe illustrated schematically:

		Content Legitimacy?	
		Yes	No
Procedural Legitimacy?	Yes	1	2
	No	3	4

Figure 2.1. Combination of procedural and content legitimacy.

¹ Expression from Hersoug and Rånes (1997)

Figure 2. Based on figure in Jentoft and Mikalsen (2001) that is an illustration of the different perceptions of legitimacy and how they relate to each other. Box 1 and 4 are clear-cut, the interesting is box 2 and 3. What is most important for legitimacy, content or procedure? According to Jentoft and Mikalsen (2001) the procedural legitimacy is important, as a decision made by the majority may not have to be forced on the minority. The democratic advantage is that if a person or group affected disagrees with the content of the decision he is perhaps more inclined to accept if he/they were given the opportunity to express their view.

Participation

According to Jentoft (2000a) it is necessary to distinguish between external and internal legitimacy. What is perceived as legitimate by those outside the decision making process may differ from that what the directly involved considers to be legitimate processes and participation (Jentoft, 2000a). The former is related to “legitimate participation”, and is thus related to stakeholder theory. The latter may be termed “participatory legitimacy”². Stakeholder theory may also give insight to why interests differ in influence. Participatory legitimacy is related to the discussion under the section of content and procedure legitimacy, but also to how interests are represented. In the following I aim to clarify who these stakeholders are that have legitimate right to participate, but also that the actual inclusion of different groups is based on other factors such as power and urgency. In the next section I shall follow the outline of Mikalsen and Jentoft's (2001) account for stakeholder theory, inspired by Mitchell et al (1997) and draws on the experience of organisational research.

Defining the Stakeholders

There are two central questions to the issue of stakeholders, one is related to who has legitimate claims, the other is related to salience that is who is actually considered significant to receive attention (Mikalsen and Jentoft, 2001). According to Clarkson³ stakeholders may be distinguished between primary stakeholders, who is: “.. one without whose continuing participation the corporation cannot survive as an ongoing concern”. And secondary stakeholders are:

² This distinction were argued by Wilson and McCay (1998) referred in Jentoft (2000a)

³ Clarkson (1995) cited in Mikalsen and Jentoft (2001; 283)

“..those who influences and effects, or are influenced and effected by, but are not engaged in transactions with the corporation, and are not essential for its survival the corporation but who are not engaged in transactions with the corporation and not essential for survival”.

Thus, the stakeholder may be considered as those groups or individual's support is essential for the organisational success and survival (Mikalsen and Jentoft, 2001). According to Mitchell et al (1997) the stakeholders' position may be "scored" according to the attributes of legitimacy, power and urgency. This implies that the definite and clear-cut stakeholders are those who hold all three attributes, those whom may be expected to be stakeholders possess two of these attributes, and those whom are latent stakeholders may claim to have one of these attributes (Mikalsen and Jentoft, 2001). These attributes are not fixed but dynamic by nature, according to situation and knowledge. Lack of power for instance, may be considered as inability to articulate or give sufficient voice to their claim. According to Sen and Nielsen (1996) the role that the groups or entities of stakeholders take on is related to their relative strength and capabilities and knowledge internally and towards government, the ability to speak with one voice. According to Charles (2001), the types of participants will depend on the type of conflict that is most urgent. Who or what in the end decides when a stakeholder becomes a participant is discussed in the following section.

From Stakeholder to Participant

In a fisheries management system, it is not always clear who qualifies and entitles stakeholders to gets managerial attention (Mikalsen and Jentoft, 2001). According to Mikalsen and Jentoft (2001) the “manager” is: “... rarely a single formal institution, but rather an network of public and private participants”. As the management may be considered as a “political coalition”⁴ the role of management is may not be a simply described organisation according to hierarchy. This implies that the decision-making is a political process. This underscores the notion of what co-management is; a political struggle of conflicting interests over scarce resources. Who participates will be thus also be dependent on the already established organisation of the administration or management. However, who has ultimate authority and power is of significance, and most commonly

⁴ Expression from Cyert and March (1963) cited in Mikalsen and Jentoft (2001)

this is the government in the vested authority of the Ministry of Fisheries, or the Minister of Fisheries (Mikalsen, and Jentoft, 2001). In co-management literature it is common to speak of roles of user groups and government. The government has an important function in enabling and empower stakeholders (see for example Pomeroy and Berkes, 1997).

Principles for representation

Functional and territorial representation

Before I continue a distinction between representation and participation may be in order, this as it seems in the literature that these are used interchangeably. Participation is related to *who* is represented, and representation is more of *how* these participants are represented. Fishermen or participants in general, are not a homogene collective (Jentoft and McCay, 1995). According to Mikalsen and Jentoft (2001) the choice of principle for representation will affect the ability of the fishermen⁵ to articulate his interest, to discuss and vote in the decision making- and consultative processes. This will ultimately influence the legitimacy of the resulting regulations (Mikalsen and Jentoft, 2001). As stated in the introduction section of this chapter, it is a democratic principle that those affected by a decision should be given the opportunity to express their views and concerns, but that direct representation is hardly practical. In the previous section I accounted for how one might identify these stakeholders and how these might qualify and actually be participants. In this section the principles of representation by function (sector) and territory is presented. The hypothesis by Jentoft and McCay (1995; 235) is that: "...the manner in which the fishermen are represented will have decisive effect on the management discourse and how they act in the decision situation". This implies that how the fishermen are represented will influence the way they perceive the management system and how they will act in the decision situation. A functional representation implies that the user-groups, or fishermen, are organised and represented according to the technology they apply (Jentoft and McCay, 1995). This is also referred to as sector-based co-management model (Charles, 2001). The specification of sector may be according to the specified fishery, vessel size, gear type etc (Charles, 2001). According to Charles (2001), the membership of a sector is analogue to the term interest group, by which the fishers are defined. If this follows the traditional line of management this sectoring may yield relative coherence between the fishermen (Charles, 2001). Another approach to representation

may be that the fishermen are represented according to the region or territory in where they reside, this is what Jentoft and Mikalsen (1992) would term as territorial representation. This is equivalent to what Charles (2001) entitles the community-based co-management model (fisher-community-government relations).

Jentoft et al (1998) ascertain that a territorial approach to representation will yield a more integrative fisheries co-management as fishermen's behaviour is more embedded in their communities' social and historical context. Though according to Jentoft et al (1998) it is commonplace in the co-management to approach communities as functional and “virtual” constructs, this may be interpreted to be that functional representation is based on an image of “community” between individuals using the same gear. A territorial community will thus differ in definition and is related to place, history and identity within a local community. (Jentoft et al, 1998). The advantage of a territorial approach to representation is that the relationship is more multi stranded than a functional representation that is a more single stranded relationship based on for example gear type (Jentoft et al, 1998). Both principles for representation call for homogeneity, equality and stability within the groups and according to Jentoft and McCay (1995) a combination of both is appropriate. The representation must be balanced in a manner such that decisions be made that all can agree on, and that it gains support within the respective constituencies and that the various groups of fishermen are given a relative share of positions in the decision making process (Jentoft and McCay, 1995).

A principle of representation that promotes community disembeddedness may lead to a behaviour that according to Jentoft (2000b) is in line with what the rational choice theorists assumes, that man acts in a rational manner to maximise his individual utility. As a result, the internal group relationship may be described as a zero-sum game, where no one is better off without others being worse off (Jentoft, 2000b). However, if communities are well functioning, fishermen are more likely to perceive other fishermen not as competitors but rather have a stronger sense of solidarity (Jentoft, 2000b) and are thus more likely to exhibit self-restraint and the internal group interaction is more coherent. The point here is that the stronger the sense of unity within the groups that are represented, the less internal conflict the more influence on policy direction and outcome.

⁵ From here the participants are specified fishermen

That functional representation is based on a more fragile coalition than is territorial representation may be assumed from this.

What type of representation is dominant may not be by chance or direct choice; it is related to the development in administrative design. I shall here not venture into the different manners to how society may organise representation that may be considered democratic, all which have advantages and disadvantages (see i.e. Hernes). According to Heidar and Berntzen (1995) Nordic politics is characterised by continuity, stability and consensus. They (Heidar and Berntzen, 1995) claim that there is a very limited system opposition and this is why the political legitimacy is high in Norway and that it is a special characteristic that the will to compromise is high. This is caused by a homogenous society without segmentation based on ethical, religious and language grounds. According to Heidar and Berntzen (1995) Rokkan's statement " votes count, resources decide" expressed that Rokkan wanted to underscore that a corporatist channel had emerged in addition to the numerical democratic channel. Thus, the Norwegian system is balanced between numerical democracy and corporative pluralism. Influence in the prior is prioritised to those who get the most votes, in the latter influence is related to the resources (power) of the interested parties. However, according to Jentoft and Micalsen (2001) the legitimacy of a system is not so much based on tradition and previous actions, but rather is a function of expectations, plans and goals about the future.

Chapter 3: The background

Introduction

In order to grasp the situation we have today, the history of how the fishery has evolved in the context of the developments in important factors will yield a better understanding of the evolution towards allocation keys and limiting access to the fishery. As stated in the introductory chapter, regulations may be regarded as the outcomes of a series of events and directional choices. Therefore, by unfolding the story of the Norwegian fishery, and the mackerel fishery in particular, I hope that this will shed some light to the objective of the thesis. The story of the mackerel fishery starts with the end of the lucrative winter herring fishery in the North Sea. Prior to 1964 the mackerel fishery was mainly a small-scale enterprise. It was a traditional coastal fishery in the southern parts of Norway. This changed dramatically when the offshore purse seine fleet directed their effort from the herring fishery, and from 1960 to 1968 the total Norwegian catches increased by over 4000 percent! But, before going into the more detailed story of the fishery, a presentation of the mackerel and its characteristics is in order. As the story of the mackerel fishery unfolds, it exhibited the classical traits of biological and economic over exploitation and the need for management measures became evident. Therefore, the early beginnings of the regulations are presented. And as time passed, major institutional changes followed having consequences for the direction and organisation of management. Here the current organisation of representation on the Regulatory council and within the Norwegian Fishermen's Association is briefly presented.

Mackerel, its biology and stock development

Where it is found, life history and migration

Mackerel (*Scomber scombrus*) is a pelagic shoaling species found from North Africa, the Mediterranean, The Black Sea, West of the British Isles, in the North Sea and in the Norwegian Sea. Its migrational pattern related to feeding and spawning, and during the winter months it migrates to greater depths where it hardly feeds several months. Though it may reach a size of 66cm and weight up to 3,5kg, it rarely is larger than 40cm and 700g (Pethon, 1996). The mackerel matures and spawns for the first time when it is approximately 30cm long, and is then 2-3 years old. In Norwegian fisheries areas, two different spawning components occur, the western component that spawns southwest of

Ireland in February to July, and the North Sea component that spawns centrally in the North Sea May-July. Both have migrational patterns that have changed in the last years. The western component migrates after spawning northward west of the British Isles and into the North Sea and Norwegian Sea where it remains during fall and winter. The North Sea component remains within the perimeter of the North Sea-Skagerrak and southern parts of the Norwegian Sea its entire life (Iversen, 1995). A third spawning component, the southern component, which spawns off the coast of Portugal and Spain has also been found to migrate to the North Sea and the Norwegian Sea, and has from 1994 been managed with the Northeast Atlantic Mackerel (Iversen, 2001).

The history of the stock

The known history of the North Sea component extends back to the early 1960's, and at the time 3 million tonnes spawned in the North Sea (Iversen, 1995). As it were, the mackerel would almost suffer the same fate as the herring fishery as early as in the beginnings of the 1970's. From 1969 to 1971, the total landings of mackerel were more than halved⁶.

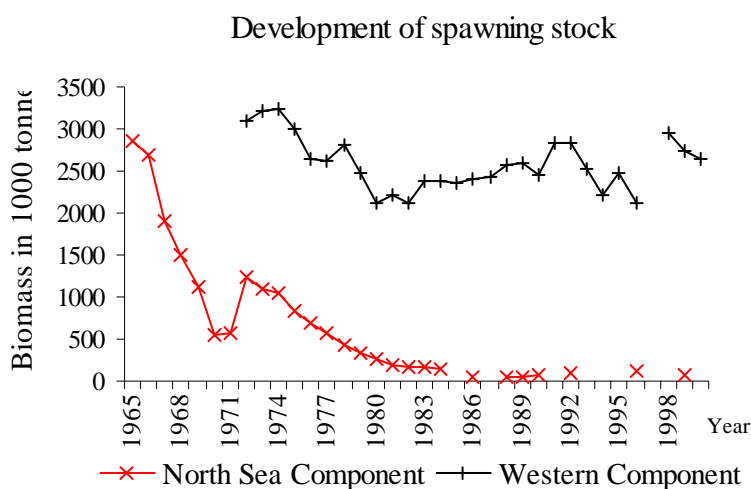


Figure 3.1. The development in spawning stock sizes of the North Sea and Western component. Based on tables from ICES ACFM report 2000.

The ICES started a working group for the assessment of the mackerel stocks in 1974 as a response to the warnings of scientists in 1971 concerned with the declining catches in the North Sea area (Lockwood, 1988). There was a slight recovery in the state of the North

⁶ Statement based on numbers presented by the ICES Mackerel Working Group (ICES, 2001)

Sea component by 1973 (ICES, 2001). However, according to Lockwood (1988) this was due to one single year class. According to Lockwood (1988), the Norwegians were aware of these problems and introduced the first technical regulation that regulated the landing size of mackerel for reduction, that no more than 20 percent was to be of fish less than 30cm (Lockwood, 1988). The Director at the time (in 1969), Sunnanå, said at the time that the researchers were not sure that the mackerel and herring stocks had been subject to an excessive fishery pressure (Nordstrand, 2000). Until the 1970's several prominent researchers still believed that the human influence to the fish stocks was negligible (Nordstrand, 2000). As a consequence of the heavy exploitation, and low recruitment the spawning stock is now estimated to be approximately 70.000 tonnes (1999) (Iversen, 2001). The biological history of the western component has been known from 1972. The spawning stock of this component has not been subject to such extreme decline as the North Sea component, and was in 1999 estimated to be approximately 2,95 million tonnes in 1998. The Southern components biological history has only been known since 1984, and this spawning stock was in 1998 estimated to 800.000 tonnes (Iversen, 2001).

The fishery

Prior to the end of the 1960's, the mackerel fishery only amounted to a small percentage compared to the total herring landings from the Northeast Atlantic (Lockwood, 1988). According to Lockwood (1988), the mackerel in European context, served in the beginning of the century as either an unsought by catch, and as an alternative when the herring catches were low. However, there was in the post war a period considerable technological advance, both with regards to seine technology and trawl technology (Lockwood, 1988). The Dutch started a new pelagic spring trawl fishery for mackerel in the northeast in the North Sea in the 1950's. The Dutch contributed to a considerable increase in the total landings. However, the catch per effort by the Dutch pelagic trawl fleet was declining, and this was the result of the technical advantage of the purse seine fleet of the Norwegians. The invention of the power block greatly simplified the hauling of the seines, and combined with the single boat shooting developed by the Icelandic greatly increased the catching power by the seine vessels (Lockwood, 1988). The effort was mainly directed towards the herring fishery, but as the story goes, from 1966 the catches of herring declined, and finally collapsed, both in the Atlanto- Scanidian (The Icelandic herring fishery) and then in the North Sea (Lockwood, 1988). Following these

events, the catch of mackerel increased from a total international level of less than 200 000 tonnes in 1964 to over 1 million tonnes by 1967. Of which Norway took over 85 percent (Lockwood, 1988).

Most of the Norwegian mackerel fishery today is conducted in the second half of the year. Today, Norway gets 31 percent of the TAC within the zones of the EU and Norway, these negotiations started in 1978 (Pehrson and Ramsli, 1998). There has not been an agreed quota in all years, in 1982-87 there was not set a TAC north of 62o (Department of Fisheries, 1998). Some of the TAC is to be caught in the Faeroes zone, but the main fishery is conducted in the North Sea, where the quota in 2001 was set to 159.930 tonnes of the total 176.370 tonnes (Fiskeridirektøren, 2001a). During the second half of the year, the components are mixed in the North Sea, but in the winter months the western component migrates from this area. Therefore it is not recommended to fish in the North Sea February to august as mainly the depleted North Sea component remains (ICES, 2001). From the early summer months, the mackerel migrates close to the Norwegian coastline and into the fjords. The Western and North Sea component has been of most importance to the Norwegian mackerel fishery (Iversen, 2001), now the western component makes up approximately 71-86 percent of the North East Atlantic mackerel stock (ICES, 2001).

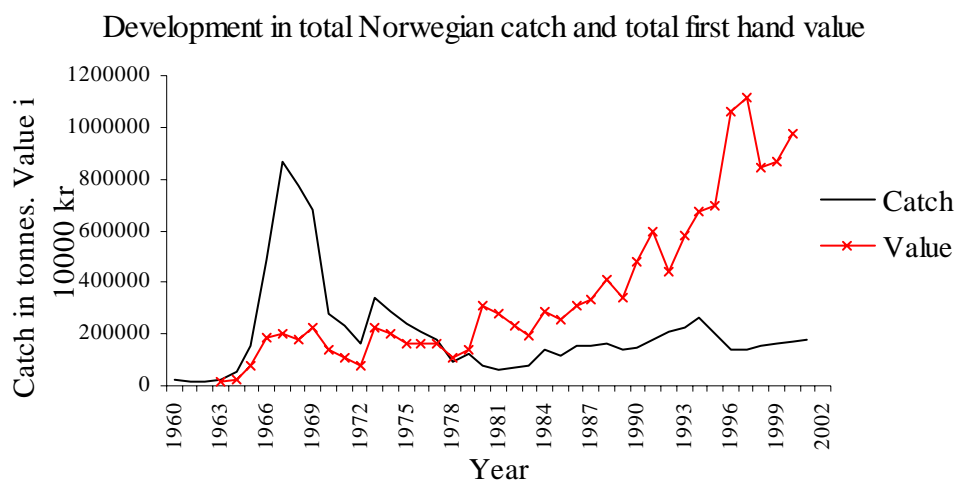


Figure 3.2. The development in Norwegian total catch and first hand values. Numbers collected by Pehrson and Ramsli (1998) table A8, and from Fiskeridepartementet (St.meld. 51,1998), appendix 3, table 3.9, Norges Fiskarlag, 2001, table 5,20, and Fiskeridirektoratet, 2001(Referat fra Reguleringsrådet).

The mackerel fishery has since the 1960s been conducted mainly by seine, trawl, driftnet, land locked seine and trolling. The trend has been that conventional gear such as drift net,

trolling and land locked seine has decreased in relative importance. Mainly the smaller vessels conduct gill net fishing and trolling (Paulsen and Steinshamn, 1994). In the county of Møre and Romsdal these conventional gear is little present so is also the use of trawl. The same was the pattern north of Møre and Romsdal. Use of traditional gear (land locked coastal seine, gill net, and trolling) has mainly been used in the more southern counties (Paulsen and Steinshamn, 1994).

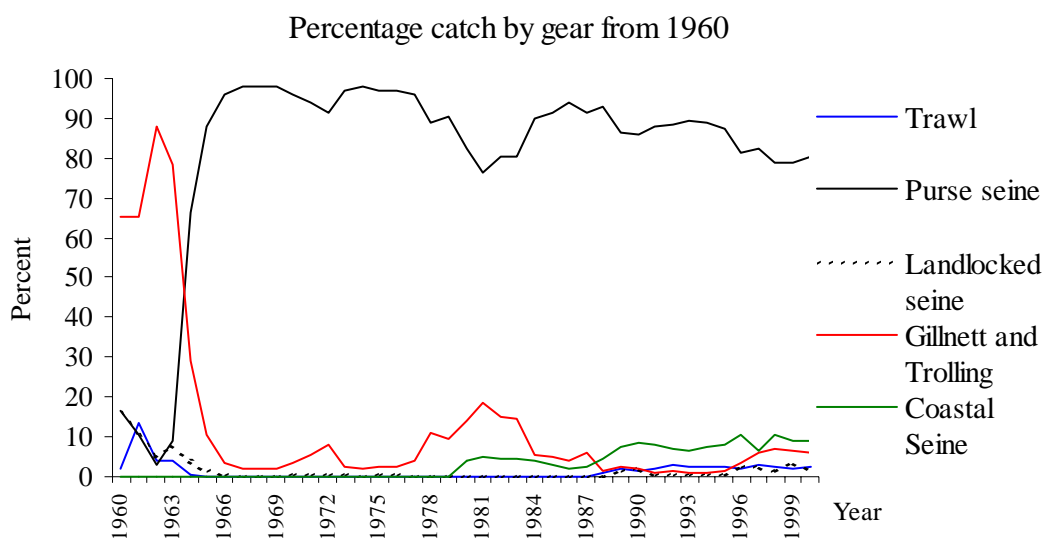


Figure 3.3. The calculated percentage share of catch by the gear type from 1960-2000. Numbers from 1960-1980 are based on Pehrson and Ramsli (1998) collected from Fisheries Statistics 1960-1988. Numbers from 1993 based on statistics from Norges Sildesalgslag Annual reports, 1994-2000. And on numbers from Fiskeridepartementet (St.meld.51,1998) appendix 3 in table 3,9.

From this figure it is evident that the type of gear dominating the fishery dramatically changed within few years. The coastal seines have become increasingly important in the coastal mackerel fishery. However it is worth noting that some of the numbers from early years are missing, so it does not draw a complete accurate picture, but it does however show the major trends.

New markets and increasing value

Most of the purse seine catches was at first landed for reduction, it took almost 20 years before purse seine catches were mainly for consumption (Pehrson and Ramsli, 1998). The main market is the Japanese, where mackerel receives high prices. The national market for mackerel is and was modest, and for frozen mackerel to be exported large investments

in land based freezer facilities was necessary. The Japanese market is in particular interested in mackerel caught from September to November and over 600grams (Pehrson and Ramsli, 1998). According to Pehrson and Ramsli (1998), 1985 presented a new era in the export of mackerel for consumption, this was the beginning of the end for mackerel for reduction. Now less than 0,2 percent of total catch value is from meal and oil production (Norges Sildesalgslag, 2000). In 1968 over 80 percent of the total value was from industrial use (Based on numbers collected by Pehrson and Ramsli, 1998). The Japanese mackerel catches had been declining since the 1980s, and Norway was able to deliver large sized mackerel of excellent quality (Pehrson, and Ramsli, 1998). The coastal caught mackerel has also landed for frozen export, but in recent years the coastal fishers have had to deliver to Russian freezer ships due to capacity problems in the land facilities (Fiskaren, 3/12-02). Though the total catches over the years have considerably been reduced, the developments in value have compensated significantly (see fig 3.1).

Beginning the Regulations

By 1973, the Norwegian Purse Seine fleet was to be subject to licensing and thus begins the story of limited access in the Norwegian mackerel fishery. This was formalised in the Participation act of 1972 which replaced the Ownership act. The use of licences to control access and to prevent further increase in the capacity was thus legally formalised (Apostle et al, 1999). The Licence Committee (Konsesjonsutvalget) of 1972 regulated the issues of capacity and politics concerning the fishing fleet, the regulation committee (Regulerings utvalget) of 1973, was concerned with the size of the catches (Christensen and Hallenstvedt, 1984⁷). In the case of allocating the TAC between the gear groups, the interest organisations seemed to be most important, and that the percentage to the gear groups reflects the position between the seine and conventional gear between the herring interests (Mikalsen and Sagdahl, 1982⁸). The allocation of allowable catch according to region was conducted centrally at the Directorate in Bergen (Nordstrand, 2000). The principle of allocation was that of fairness and equity (Christensen and Hallenstvedt, 1984). According to Nordstrand (2000) the allocations were based on the balancing of historical rights, allocation according to region, gear groups and companies, in addition to considerations to quality and continuous access for the onshore production sites

⁷ In Nordstrand (2000)

⁸ In Nordstrand (2000)

(Nordstrand, 2000). From the mid 1960's interests associated with the Boat Owner Organisation (Fiskebåtredernes Fellesforening) had on several occasions indicated that they wanted a reduction of the purse seine vessels, this was repeated by the Seine fishermen organisation (Notfiskarsamskipnaden) in 1972 (Norsk Fiskerinæring, 2001). The Participation act may be considered a response to the interests that the existing fleet had in the herring fisheries. Other accounts regard this act as the outcome, which was initiated by the Fisheries Director in Bergen. According to Nordstrand (2000) the regulations in the beginning were concerned with protecting the stocks, but rather they were regulations according to who were allowed to own fishing vessels, and acts like the Trawler act were implemented according to social considerations. According to Nordstrand (2000) the Directorate initiated the regulation of the offshore Purse Seine fishery in the North sea already in 1967 three years after this fishery had started, and that these regulations came as a response to the condition of the stock and the market situation. The high level of catches in the North Sea industrial fishery coincided with high catches in the industrial fisheries in Peru and Chile and that this led to a reduction in price to 1/3 of the prior first hand price in the market (Nordstrand, 2000) (see figure 3.2). In 1977, it was decided that the Purse Seines were not allowed to fish south of 60°N. This led to massive protests and 100 seine vessels gathered in Bergen to mark their protest (Norsk Fiskerinæring, 2001). This was a measure in order to protect the North Sea component of the mackerel, which had severely declined. In 1977, Norway adopted the 200 nautical mile exclusive fisheries zone, and according to Apostle et al (1998) this was the start of the present resource management regime. Under the provision of the Laws of the Seas, (LOSC, art. 56(1) , “the State has sovereign rights for the purpose of exploring and exploiting, conserving and managing the fish stocks of the zone”. And “the coastal State shall establish the total allowable catch” (TAC) (LOSC, art.61 (1)). The Law of the Seas also laid a responsibility by the states that share stocks to come to agreements concerned the common management. With fish stocks becoming a national common property, the state had prerogative and opportunity to control the fisheries within its zone and exclude foreign vessels. The international negotiations over shared stocks are amongst other things based on historical rights.

The Formal Organisation of Representation

The Regulatory Council

The Regulatory Council (formed in 1983 through an amendment of the Salt Water Fishing Act) is the formal arena for representatives of interest organisations participating in the management system. These are mainly industry interests. This replaced the two other councils that were mentioned in the previous section. The Regulatory Council meets twice a year, and is held by the Fisheries Director at the Fisheries Directorate in Bergen. The Director prepares the agenda. The Regulatory Council has status as an advisory board to the Minister of Fisheries in the Ministry of Fisheries in Oslo who has the ultimate authority to write out new regulations under the provision of the laws. In addition to the full-fledged members with the right to vote, there are a number of advisors who are scientists and representatives from the sales organisations. A number of diverse interests are also granted status as observers, mainly employees at the Directorate and the Department. The Participant Act is the legal frame for who may participate in the fishery and the Salt Water Fishing Act is the legal frame for regulations of gear types, closed seasons and areas, setting the Total Allowable Catch (TAC) and more. It is also practice to send proposals for regulatory and legal change out on “hearing”, in which most of the interested organisations and agencies may express their views (Apostle et al, 1998, Jentoft and Mikalsen, 2001).

The Norwegian Fishermen's Association

The Norwegian Fishermen's Association was founded in 1926 and is the largest fishermen's interest organisation. It consists of regional county groups, but from the 1960s specialised group organisations such as the Norwegian Vessel Owner Association (Fiskebåtredernes Forbund, founded in 1946 by purse seine pioneers), and The Seinefishermens Association (Sør Norges Notfiskarlag) became members of the Norwegian Fishermen's Association. Through county branches or the functional group organisations, the members channel their requests and demands. The Norwegian Fishermen's Association has an Executive Board and the Annual Meeting where important proposals are debated and voted over. The representatives of the Executive Board are from the northern and southern regions and from the Boat Owners Association (2001). The representatives on the Annual Meeting are from all the county branches and the functional group organisations. These member organisations have their own Executive

Boards and Annual Meetings, and have certain autonomy. However, the groups vary in both membership numbers and numbers of representatives on the national level. County groups have one representative on the national Annual Meeting for each 300 member (2001). The Norwegian Fishermen's Association is represented at the national Regulatory Council (established in 1983) as the only fishermen's organisation with full rights. The Norwegian Fishermen's Association appoints committees to work on central issues, such as the Resource Allocation Committee (Fiskeridirektøren, 2001, Apostle et al, 1998, Hoel et al, 1991).

Chapter 4: The 1994 Allocation Key

The situational context

In 1990 the Norwegian Fishermen's Association appointed a work group to look into a possibility of a long-term allocation key for the pelagic fisheries. The Resource Allocation Committee handed in their report in 1991, where it was underscored that its representational position in the management system required united fishermen standing by the advice of the organisation (Norges Fiskarlag, 1991). As a response to the internal conflicts over annual allocations between the different fleet segments, the Resource Allocation Committee promoted an allocation scheme to provide stability (Norges Fiskarlag, 1991). The purse seine group expressed concerns that the coastal and trawl group gradually had been given larger shares of the quota, and that they would not stand for this (Norges Fiskarlag, 1991). This Resource Allocation Committee found it preferable to let allocations be based on historical catches, and regarded that one would by not emphasising regional distribution give equal opportunities disregarding place of residence. However, only in 1994 a real effort was aimed at implementing a long-term allocation key in the mackerel fisheries.

1994 was a special year for all Norwegians and perhaps in particular for the fishermen. This was the year of the EU referendum, and the year the European Economic Area agreement went into force. This was an adaptation to the European market. With the implementation of the European Economic Area agreement, the Main Agreement of 1964 for the annual negotiations for financial transfers between the state and fishermen would significantly be altered. Securing fishermen's incomes by price subsidy would under the European Economic Area agreement be considered as disruptive for competition and thus against its principle. Price and catches are the main factors that dictates the income of fishermen. With price subsidies being illegal, the dependency of market price and quota share would be increasingly important for the economic viability of the fisheries. An attempt to introduce an Individual Transferable Quota (ITQ) system had in 1991 been flatly rejected by the industry and the Parliament (see i.e. Hersoug et al, 1999). However, with the proposed ITQ system, the signal was that the government opted for less involvement in the question of allocations.

The 1994 Resource Allocation Report

In July 1994 an external expert work group put forward their report to the Norwegian Fishermen's Association. This expert group had been given the mandate to address and discuss criteria for a long-term allocation key in several fisheries. This was to provide a basis for the forthcoming Annual Meeting in the Norwegian Fishermen's Association in which the allocation key would materialise from. In the following I will present their work and analysis, and the final allocation key that the Norwegian Fishermen's Association proposed.

According to Paulsen and Steinshamn (1994) any re allocation in quotas must be argued in line with the expressed goals of the fisheries policies. However, Paulsen and Steinshamn (1994) points out that in the Norwegian context, the management regime has been most concerned whether the catches have been on a sensible level and that the capacity in the fleet segment of the industry be reduced. A reason why fisheries economic arguments have not been prominent was according to Paulsen and Steinshamn (1994) that the Norwegian fisheries policy cannot be understood as directed central governance. Rather the management has been a series of “historical compromises” between different parts of the industry, organisations and central authorities. According to Paulsen and Steinshamn (1994) there has never been an explicit definition of high economic yield as a goal and the allocation effect is a characteristic trait of the management system. The policy goals recognised by Paulsen and Steinshamn (1994) were mainly that patterns of settlements should be conserved, the resources protected, jobs should be stable and safe and the real profitability in the industry should increase. Similar to most policy objectives, these reflect contradicting goals, the practical approach to the debate is on the weighting of conflicting goals and interests (Paulsen and Steinshamn (1994).

In the discussion concerned with allocation of quotas, the report by Paulsen and Steinshamn (1994) found factors related to employment and recruitment, settlement (regional concerns), biological/ecological and historic shares to be relevant. These are not specific to the mackerel fishery, but reflect a general situation in the fisheries management. According to Paulsen and Steinshamn (1994) claims for interest to participate may be based on these principles, and referring to these they could serve for the purpose of legitimising political decisions.

With regards to both employment opportunities, securing jobs Paulsen and Steinshamn (1994) recommended no significant alteration of the allocation. This was with regards to total industry employment, job security, and year round operation and opportunities for new recruits. With regard to regional and settlement considerations, Paulsen and Steinshamn (1994) interpreted the policy statements in that the main pattern of settlement was to be continued, and meaning larger geographical areas such as regions and counties. Their recommendation on this account was that the historical pattern for by region and county should be continued. Furthermore Paulsen and Steinshamn (1994) recommended that vessels without onboard production to be prioritised, along with priority of vessel groups residing in fisheries dependent regions. With regard to economic considerations, Paulsen and Steinshamn (1994) did not give any recommendations. Rather they reflected over the different perspectives and possible implications of a purely business economic and a more general social economic perspective. On the other hand, in a purely business economic perspective, the capital costs and management costs and with environmental considerations the smaller vessels should be prioritised. According to Paulsen and Steinshamn (1994), the social economic and business economic goals would coincide if the unemployment level in general were low. Though they made no clear recommendations to the economic question, Paulsen and Steinshamn (1994) further discussed management tools to prevent economic over fishing, the pros and cons of limiting access through licences, taxation and transferable quotas. As a result of the difficulties with regards to what economic performance constitutes, along with factors such as unemployment levels, it seems that Paulsen and Steinshamn (1994) were unable to make any clear recommendations. Thus again this would leave the issue open of considerable political debate. With regards to biological and ecological considerations, the general recommendation of Paulsen and Steinshamn (1994) was that the most size selective and species selective vessel types should be prioritised, at least until multispecies management is better developed.

As a final issue to be considered as important for the allocation, Paulsen and Steinshamn (1994) discussed the question of historical shares. According to Paulsen and Steinshamn (1994) the strong position of this argument had to be understood in relation to the importance of the fisheries along the coast. When the question of whom will participate, the quantity and fishing patterns, the allocation may be based on historical shares. Thus it

may be argued the dependency and harvest over a long historical period constitutes a basis for claiming customary and grandfather rights. Further, Paulsen and Steinshamn (1994) states that if historical shares is to be maintained as a objective in it self, than the time period from which allocation rights should follow should be defined first. Paulsen and Steinshamn (1994) underscored the necessity of defining historical rights. These rights may be coupled to individuals, vessel groups or geographical areas. According to Paulsen and Steinshamn (1994), the geographical rights would meet the settlement criterion mentioned above. When it came to linking historical rights to individuals or vessel groups, this implies that the allocations should follow the prior share of quota or catch of the actors (Paulsen and Steinshamn, 1994). This means that one would have to decide which fishermen or vessel groups have historical rights. The problem as Paulsen and Steinshamn (1994) points out is that the total fleet composition, resource base and activity patterns have changed significantly over the last decades. According to Paulsen and Steinshamn (1994) this would make it difficult to tie specific customary rights to individuals and vessel groups and thus they recommend that the time period not be longer than the last 10-15 years. Furthermore, what should the content of historical rights be based on? Should the historical rights be linked to quotas or share to single species or be adapted to a broader economics of different fisheries? The advantages as Paulsen and Steinshamn (1994) points out are that the latter allows for more flexibility and that the fishermen be less dependent specific species. On the other hand this would probably give the authorities less predictability and more difficulty in allocation between the participants. Also, should rights relate to historical catch or quota shares?

According to Paulsen and Steinshamn (1994), differences between actual catch and quota might yield relative different stakes for the different participants. Thus a discrepancy between catch and quota shares would need to be addressed in order to decide which principle to use. In sum Paulsen and Steinshamn (1994) states that using historical shares means that it must be clarified which actors have which rights and one must decide whether allocations be based on historical catch or quota shares. Paulsen and Steinshamn (1994) could se how this might be a problem in achieving consensus to the principle for allocation.

Paulsen and Steinshamn (1994) found two more practical reasons to why historical shares should be the principle in the decision of allocations, First as an allocation of catch levels by today's participants will create less conflict than that of an allocation based on other principles. Historical shares might form a basis for compromise, as it is a simple criterion. Indirectly this would also lead obtaining the goal of settlement and employment opportunity. Second, the quota allocation was also the central condition had most significance in the participant's previous dispositions with regards to investments, choice of fishing pattern and occupation (Paulsen and Steinshamn, 1994). Thus according to Paulsen and Steinshamn (1994) an allocation based on previous catch would secure the stability in the industry in that the previous adaptation by participants would not diverge much from future needs.

However, the report by Paulsen and Steinshamn (1994) stated that cementing the pattern of harvest, vessel structure and business form would in a long-term perspective be unfortunate. This as some flexibility is required as the resource base fluctuates, availability changes, technology develops and markets alter. Further Paulsen and Steinshamn (1994) reckoned that a quota allocation the industry regarded as permanent would reduce the legitimacy of the management regime. In their (Paulsen and Steinshamn, 1994) view the limitations in access and harvesting rights had been accepted as they were considered as means to solve crisis or transitional phases. Paulsen and Steinshamn (1994) imply that if the resource situation improved this might lead participants to accept the allocation of rights that would lead to elements of ownership (property) rights of the resources through a more permanent allocation to particular vessel groups (see Hersough et al 1999, path dependency). Therefore the allocation between vessel groups should not be so withstanding as to fisheries resources as a common property resource could be questioned (Paulsen and Steinshamn, 1994). With a strong emphasis to the historical shares of catch, then what would the proposed allocation key have to be built on? This will be addressed in the following section.

The allocation of mackerel prior to 1994

With regard to the allocation between the different fleet groups, the historical catch or quota could be a practical guide for the future.

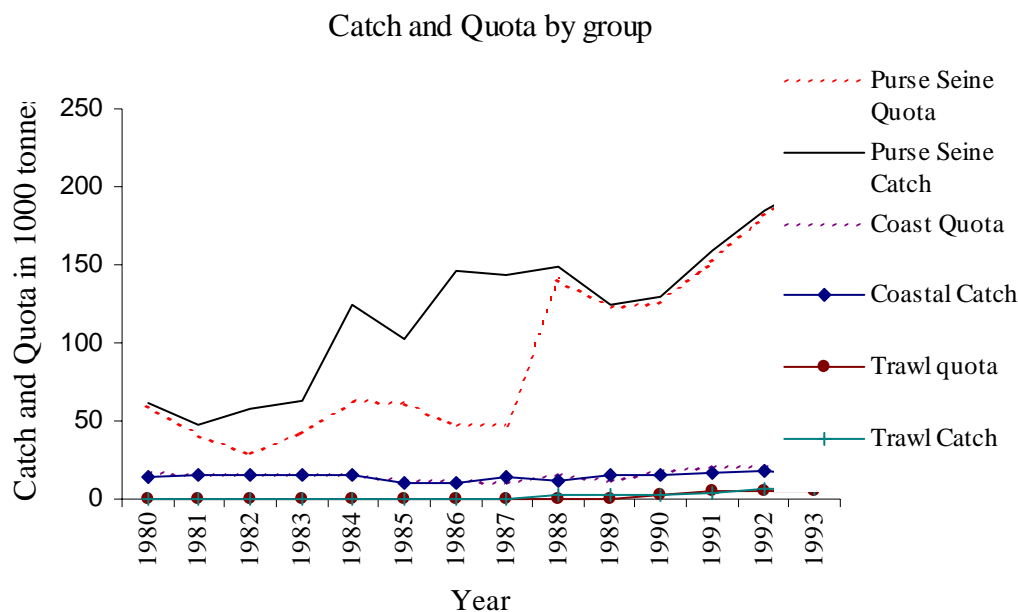


Fig. 4.1 Based on numbers from table 3,9 in St.meld 51, appendix 3. In the years between 1982-1987, there was no set quota north of 62°, and The SUK group (seines without licence) between 21,35-27,5m was in 1980-1983 regulated under the coastal group south of 62°, from 1986 all SUK vessels was regulated under the purse seine group, defined as vessels over 21,35m fishing with seine. The coastal group quota was stipulated only. Coastal group is here defined as vessels under 21,35m, seine and conventional gear. The trawlers catch and quotas are not presented here.

As it is evident from fig 4.1, using historical quota would constitute some difficulties, as there was considerable difference between theoretical quota and actual catch during most of the 1980s. After 1988, the difference between catch and quota is not significant. The coastal group quota was stipulated, based on the catches in previous years. The increase in the catch in the purse seine group is explained by increasing quotas, but also by the transition of SUK (seines without licence) vessels from coast.

A percentage share of the catch may provide a better picture over the actual historical shares:

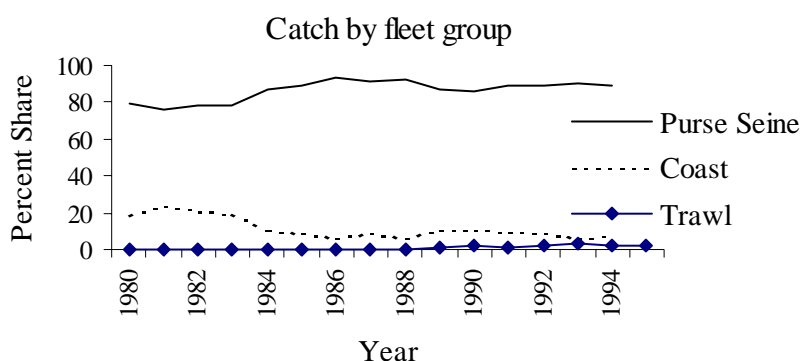


Figure 4.2, The catch and the quotas by the type of vessel group (gear group) calculations based on numbers from St. Meld 51, Appendix 3 table 3,9 (Fiskeridepartementet, 1998). Again, there was no set quota north of 620 between 1980-1983.

By examining the percentage catch by fleet group from 1980 including 1994 (Fig 4,1) it is evident that the allocation of catch between the groups has been quite stable. However the purse seine group got from 1984 a slightly larger share of the catches, and from then had a share over 80 percent. It is worth noting from 1986 all SUK (seines without licence) vessels were regulated with the purse seines. Previously these had been managed as a coastal group (Fiskeridepartementet, 1998). This may explain the drop in the coastal share from 24 percent in 1981 to less than 7 percent in 1986. Since then the coastal group had a percentage share of catch less than 10 percent on average. However, if the average is calculated based on numbers from 1980 without discriminating the seine vessels without licence, the coastal groups has had an average quota of 18 percent, and catch average of 12 percent. The trawl share is not presented here, but according to the numbers in St.meld. 51 (Fiskeridepartementet, 1998), the trawl share had been from zero and up to less than 3 percent. This is inconsistent of what was presented in the report by Paulsen and Steinshamn (1994) who calculated the trawl share to approximately 5 percent! Thus the purse seine share after 1988 was approximately 89 percent. In the report Paulsen and Steinshamn (1994) indicated the time period of 10-15 years should be used in the discussion over historical shares, however they did not specify how the transition of the seine vessels without licence vessels (SUK) should be treated. What this implies is that depending on numbers chosen, calculations may vary somewhat. Thus there is considerable room for interpretations that may differ depending on point of view.

Development by region and fleet structure

With regard to the developments in regional allocation, there has been notable difference in how the mackerel catches are allocated.

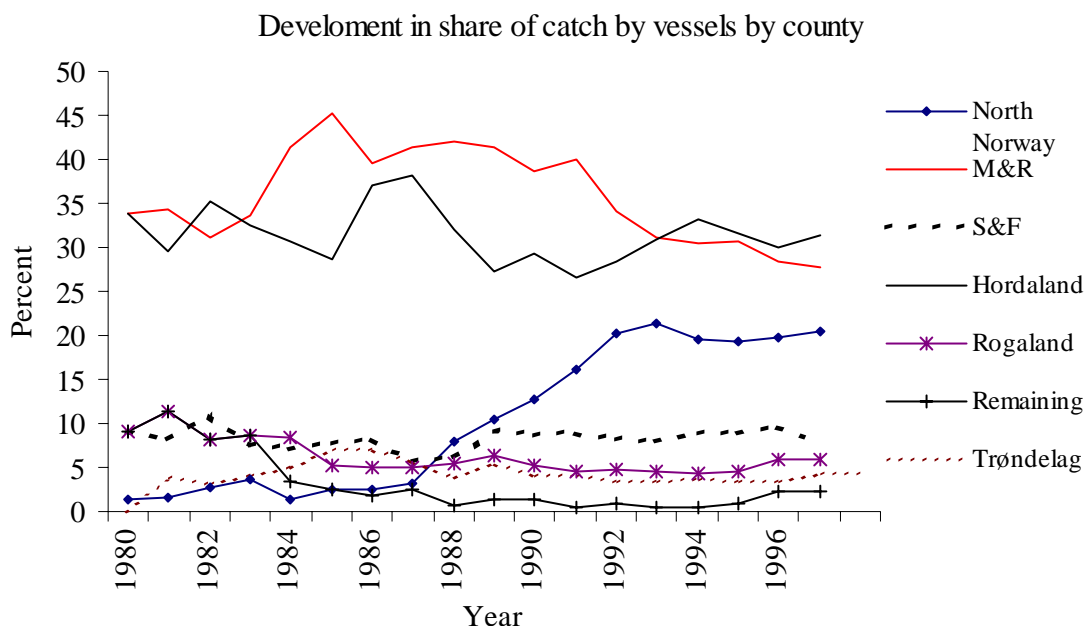


Figure 4.3, based on numbers from St.meld. 51 (1997-98). These are catches landed by vessels according to their home county. The figure also shows the development after 1994.

From figure 4.3, two counties, Møre and Romsdal (M&R) and Hordaland stand out in particular, with having a considerable share of the mackerel catches landed by vessels from their counties. Also, the three northern most counties have had a different development than the other counties. Northern Norway has had a positive development in the share of mackerel catches that no other counties have. What used to be traditional mackerel areas (under remaining) and Rogaland has had a negative development in the share over mackerel catches. In Paulsen and Steinshamn's report (1994), the geographical allocation is presented in percent by county, which illustrates a slightly different picture. During this time period (1980-1994) the total catch increased from 77 000 tonnes to 260 000 tonnes. The share of Møre and Romsdal was reduced whilst the Sogn and Fjordane and south (including Hordaland) got an increasing share along with the Northern most counties. In 1990 Hordaland had 27 purse seine vessels, and Møre and Romsdal had 40. This was a reduction from 1980 by 25 vessels (or 41%) in Møre and Romsdal, however the total capacity in hecto litres (hl) only reduced with 14 percent from 1980-1990. (Paulsen and Steinshamn, 1994,pp26). As Paulsen and Steinshamn (1994) points out, the

total numbers of purse seine vessels was halved from 1970-1980, but without the total capacity being higher in the 1970s.

By studying the pattern of how the fishery has been conducted and how the fleet has developed we might get some additional information to understanding the result of the allocations in 1994 and where special interests have lied. For the purse seine fleet, defined as seine vessels more than 28m the development was that the numbers of vessels more than halved in the period between 1980-1990. However the number of vessels in the largest category with the capacity of 10000million hl increased (Table 5,1 pp 25 in Paulsen and Steinshamn, 1994). The larger purse seine vessels, vessels over 28m (including the SUK vessels between 70-90feet) take the main part of the fishery. Gillnet was only used by vessels less than 28m, and trawl only by vessels over 28m. (Paulsen and Steinshamn, 1994). In the northern most counties almost all mackerel is fished by purse seines larger than 28m. In Møre and Romsdal seine is the most important gear but then also by vessels less than 28m. Though there had been a general reduction in both numbers of seine vessels and capacity from 1980-1990, neither was significant in Hordaland and Møre and Romsdal. As mentioned earlier the later development toward 1990 was that the numbers of larger vessels had increased (Paulsen and Steinshamn, 1994). Benefits from larger units had increased the profitability of this fleet, but the reduction of capacity was not so successful if decrease in numbers of vessels were the instrument for capacity reduction (Paulsen and Steinshamn, 1994). In the case of industrial trawls, which may participate in the mackerel fishery, the numbers of vessels had decreased by 41 percent. However, the total capacity in brut tonnes actually increased from 1980-1992 by 11 percent. The most important industrial trawl counties is Rogaland, Hordaland and Møre and Romsdal, these counties had a reduction in numbers of vessels from 1990-1992. Mackerel has not been significant contributor in their total economy (Paulsen and Steinshamn, 1994). Coastal seine may be defined in two groups, vessels between 13-25,9m and vessels under 13m, according to Paulsen and Steinshamn (1994), 5-15 percent of their pelagic catches are based on mackerel, herring is most important. According to Paulsen and Steinshamn (1994) the development in number of vessels in this group over 13m between 1980 and 1992 did not exhibit any typical trend, but that the tendency has been an increase in capacity. In the smallest vessel group participating, those under 13m

had from 1981-1991 increased from 15-50 (Paulsen and Steinshamn, 1994).

The resulting allocation key

The Allocation key that came out of the Annual Meeting in 1994 the Norwegian Fishermen's Association may graphically be presented:

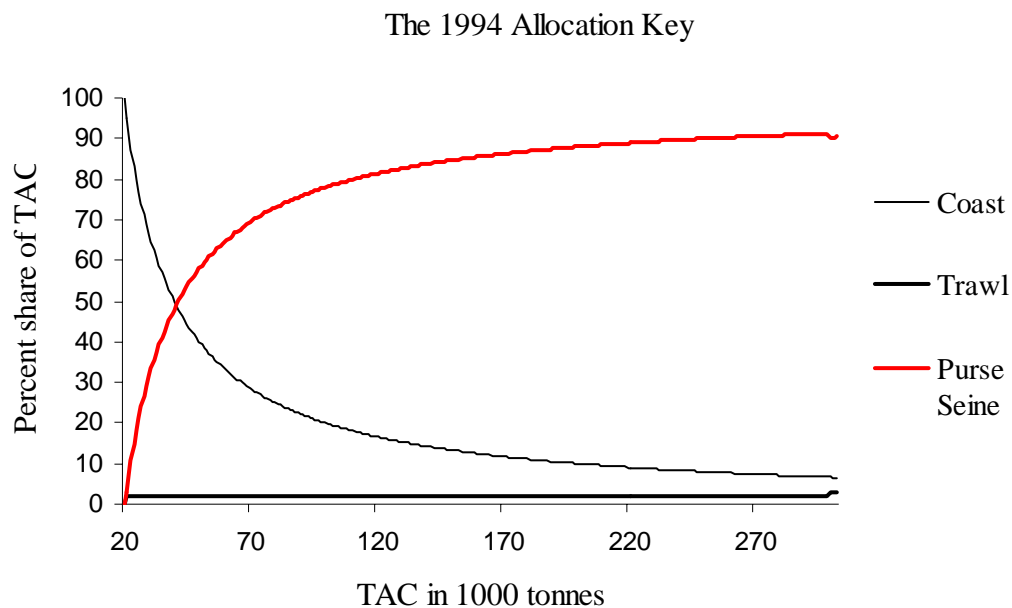


Figure 4.4 Is based on the percentage shares to the different groups, the coastal quota was set as a stipulated quota, of 20.000 tonnes, the trawl group share is 2 percent, but for quotas over 300.000 tonnes their share would increase to 3 percent. The Remaining is allotted to the purse seine group included the SUK vessels. From the numbers in the Resource Allocation Committee of 2001 (Norges Fiskarlag, 2001)

The figure (4.4) shows that with an increasing total allowable catch (TAC) the share of the coastal group would progressively become smaller and the purse seine quota share would develop in the opposite direction. In situations of an increasing TAC this would mean that mainly the purse seine fleet (including seine vessels without licence, SUK) would benefit, the stipulated quota of 20.000 tonnes to the coastal group would remain. However, vessels in this group using conventional gear should have their catches from the coastal group quota, but should be allowed to continue to fish even if this had all been caught (Norges Fiskarlag, 2001). This allocation was to be the basis of the allocation in the period from 1995-2001. With the average quota of approximately 200 thousand tonnes from 1990-1994, a coastal group quota of 20.000 tonnes would constitute approximately 10 percent. Thus, the quota to the purse seine and SUK would be 88 percent at this quota

level. The size of the quota is as mentioned in chapter 3, dependent on the negotiations with the EU and the Faeroes over the western stock component in addition to stock development. The North Sea stock has since the 1970s shown no sign of recovery (se fig. 3.1). But also mentioned in chapter 3, the development in value was positive and might be a reason for optimism in the fishery. In the next chapter I shall present what the experiences of the 1994 allocation key up to the time of revision in 2001. And under this chapter, emphasis is laid on the processes and interests behind the allocation key.

Chapter 5: The 2001 Allocation Key

The experience from 1994

The allocation proposed in the mackerel fisheries was presented in the previous chapter. Now I shall review the experiences with from 1995, which was presented in the report by the Resource Allocation Committee (Norges Fiskarlag, 2001). With a long-term scheme in place for the allocation of mackerel between the different fleet segments, and with prospects of further limitations in participation in the fishery, the Norwegian Fisherman's Association seemed to have come to a satisfactory situation. However, this was not to be the case. In most cases the Departments would not follow through the recommendations by the Fishermen's association. Shares to the offshore fleets generally followed the recommendations, with a slightly higher share to the trawlers. In September 1996 the Minister of Fisheries decided to stop the fishery for all groups in the coastal fishery. With this new situation the coastal fleet wanted compensation, and the discussion was then to where this compensation would come from. According to the 2001 report (Norges Fiskarlag, 2001) the coastal fleet argued for a larger share of the TAC (Total Allowable Catch), which other interests, offshore, opposed by arguing that this was not the intention of the 1994 agreement and that the coastal group quota should be reallocated with no transfers from offshore.

In 1997 the Executive Board in the Norwegian Fisherman's Association appointed a working group to deal with the division in the coastal fleet between the conventional vessels and seine vessels less than 13 with the remaining coastal seines. Unable to come to a unanimous proposition, the case was treated "organisationally" (Fiskarlaget, 2001). Again in 1998 a work group was set to resolve the situation in the coastal group, and again this had to be treated "organisationally". An allocation of 20.000 tonnes was first decided, but based on protests the case was reconsidered and the coastal quota was set to 25.000 tonnes. The department set the group quota to 30.000 tonnes.

Prior to 1999 the regulations were only determined in a preliminary regulation for the first half of the year. Again the department set the coastal group quota higher than the recommended by the Norwegian Fishermen's Association. Also in 1999 and 2000 the Department set the coastal group quota to 30.000 tonnes, 5.000 tonnes more than what the

Norwegian Fishermen's Association recommended. This quantity was taken from the offshore purse seine quota (Norges Fiskarlag, 2001).

How was the fishery?

In this section I shall give a review over the development relevant for the mackerel fishery after the allocation key was implemented in 1995. Quota shares have not followed the key, but relevant is also the development in the resource base and markets. The catches have been slightly higher than the quota in the trawler and purse seine group. The coastal group did not fish their quota in 1995 and in 1998, but have in the other years slightly exceeded their quota. In 1996 that was a special year, the coastal group exceeded their quota by 1000 tonnes. This was also the year the fishery was stopped in this group in September (Norges Fiskarlag, 2001, Table 5.19). It may not be possible to say how the allocation key has had regional consequences by examining figure 4.3 in chapter 4. But one may interpret that the southern counties along the Skagerrak coast benefited from the high availability of mackerel in 1996.

The development of the total catch and value of the fishery is presented in figure 5.1.

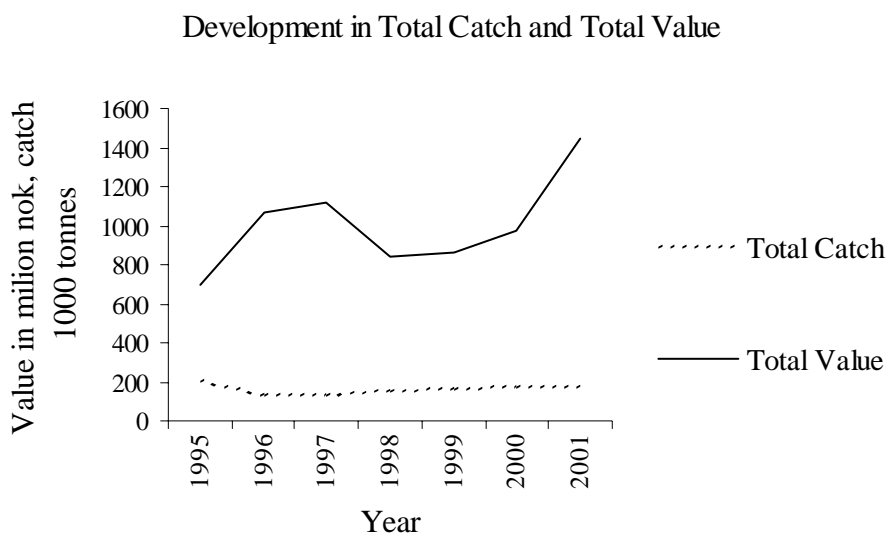


Figure 5.1 Based on values from the Directorate, economic and biological key figures from the Norwegian fisheries, table 2. And catch from the resource allocation committee table 5.2. Catch size from Fisheries Director 2001 (Reguleringsrådet), Value calculated with the average price 8,2 kr in week 37, 2001, Fiskaren October 3rd. This was the highest price this year, thus somewhat over estimated value.

The total catches had remained relative stable, with an average now of 160,5 thousand tonnes, a fall of 40 thousand tonnes from the 1990-1994 average. The total average value on the other hand, was in the previous period 500 million kr, and from 1995-2000 approximately 926 million kr. A drop in price for purse seines catches caused the drop in value from 1997 to 1998 (Norges Sildesalgslag, 1998). According to Pehrson and Ramsli (1998) this was mainly due to a significant fall in the price for frozen mackerel in Japan and in the export market for Norwegian mackerel in general. Since then, the value has again increased. On average, the offshore caught mackerel received a higher price than the coastal mackerel, with exception of the mackerel caught by driftnet. In 1998, this mackerel received average prices over 12 kr/kg and the offshore mackerel for consumption 5,5 kr/kg. However the driftnet mackerel quantum was only 300 tonnes (Norges Sildesalgslag, 1996-2000). 2001 was a good year for the mackerel fishery, export increased mainly due to increased demands in Eastern Europe, the export value of mackerel was 2,39 billion kr the most economical important pelagic species for export (Norges Sildesalgslag, 2000).

How the quota actually was allocated between the three main groups is shown in figure 5.2.

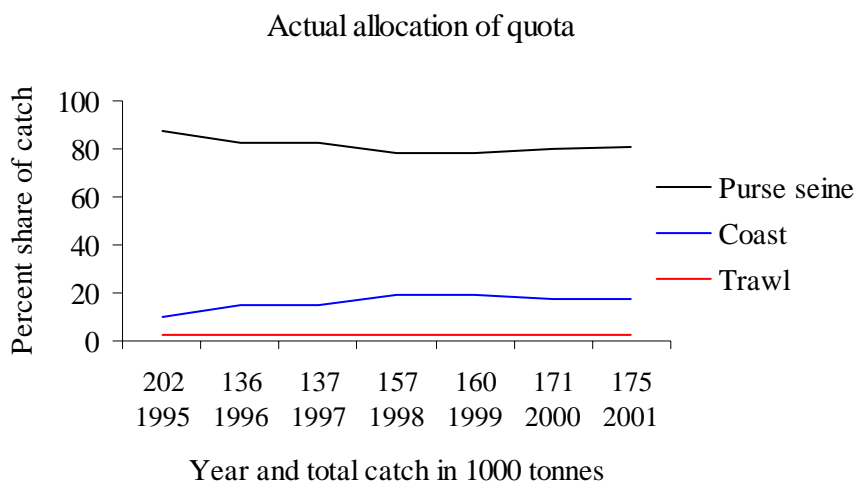


Figure 5.2. The actual percentage allocation of catch between the different fleet groups according to quota. Based on table 5.20 in the Resource Allocation Committee (2001). For 2001, figures from Fisheries Director (2001) case 18/01: The regulation for mackerel 2002, table 1.

From the figure 5.2 the adjusted quotas from 1998 to the coastal group was taken from the purse seine group. However, as the group quota is set at 30.000 tonnes and not as a

percentage, the slight increase in TAC (see fig. 5.1) was in total allocated to the purse seine fleet. In the meeting at the Regulatory Council in 2000, the Coastal Fishermen's Association expressed their discontent that only the purse seine fleet benefited from an increased quota (Fiskeridirektøren, 2000).

The 2001 Report from the Resource Allocation Committee

In 1999, the Executive Board of the Norwegian Fishermen's Association appointed a working group that was to follow up on the 1994 decision on the Allocation keys in the fisheries. In January the working group, the Resource Allocation Committee, presented their work that was an analysis of the experiences with the allocation keys from 1994 along with recommendations to new keys. In addition the Resource allocation committee addressed the issue of access to the fisheries for the coastal groups (see chapter 6). The working group consisted of 4 members from the Northern co-operation area, 2 from the Southern area and 2 from the Norwegian Vessel Owner Association. These would appoint the Managing Director, Johannes M Nakken, of the Herring Sales organisation to lead the work. The committee was assisted by a secretariat.

The recommendations resulted after several meetings between the members of the committee, and meetings with representatives of the Department of Fisheries, the South-Norway Trawler association and the county membership groups. The recommendations were unanimous. However, with regards to the duration of the allocations some initial problems were revealed. The Norwegian Vessel Owner Association had, on a prior occasion as a part of the conditions for their continued membership in the Norwegian Fishermen's Association, demanded that the allocation between offshore and coast become permanent. The Executive Board of the Norwegian Fishermen's Association responded in a language which led the Northern co-operation area threaten to withdrawal from the committee work. (Norges Fiskarlag, 2001). The committee requested a clarification to the mandate. The work continued, and the Committee agreed that the allocations would last for 6 years (Norges Fiskarlag, 2001).

The recommendations were that the coastal fleet (vessels under 21,35m) should have 17 percent of the total quota, but that at a total quota less than 147,060 tonnes the coast would have a set quota of 25.000tonnes. The Trawlers should have 3 percent, and the

Purse seines would have the remaining. Of the Purse seines the SUK (seines without licence) should have 8,2 percent. This deviated some from the 1994 allocation, and the reason the committee gave for this was that the rationale for a stipulated quota for the coastal group had been altered since 1994 in relation to the dispensation for parts of this group. Thus, the committee found it reasonable that the coastal group also followed a percentage plan so that this group follows the variation of the TAC (Total Allowable Catch). The percent was set to 17, as this was the current share of the quota. And furthermore the committee found it reasonable that the coastal group be guaranteed a minimum quota of 25.000 tonnes.

As the committee found that the seine vessels without licence (SUK) benefited from structural adjustments in the licensed purse seine fleet, it was reasonable that the SUK vessels be singled out as a separate group. These could possible go into a structure group along with other vessels between 21-27,99m. Furthermore the committee found it reasonable to set the trawlers share to 3 percent independent on the variations in TAC.

As in the 1994 report by Paulsen and Steinshamn, this committee was to do their evaluations and recommendations according to criterions that were considered important. Again these reflect the problematic issue of weighting contradicting goals against each other. The political guidelines stated in the Stortingsmelding 51 (Fiskeridepartementet, 1998) reflects this, where the objective of the government. The government objective is that the politics should work for a profitable development in the fishing industry based on a management that is sustainable. Further, according to the report (Fiskeridepartementet, 1998) the means to secure employment and settlement along the coast is by market orientation and increase added value. But in addition to this, the government regards that a varied fleet with main emphasis on the coastal fleet is part of a strategy to ensure goals for regional development (Fiskeridepartementet, 1998). The government also stated that the allocations must be such that the total ability to compete on the international market is increased (Fiskeridepartementet, 1998). The government emphasised increased profitability throughout the entire document. As in the 1994 report by Paulsen and Steinshamn, the point of historical rights and participation was again addressed. Again, in the analysis but the 2001 Resource Allocation Committee regarded historical catches to be the preferable principle by which to allocate the quotas. This was based on a notion that

this would be least controversial. In addition, the committee regarded this as an appropriate means in which employment and regional patterns were maintained.

The Annual Meeting in the Norwegian Fisherman's Association October 2001: before, during and after.

Before the report from the Resource Allocation Committee was published the debate over quotas started in the media. In particular the South-Norway Trawler Association (Sør-Norges Trålerlag) was active. They had received 5 million kr in support from the Rogaland county administration to 50 of their trawlers who were in a financial tight spot. At the same time the leader from the Resource Allocation Committee, Johannes Nakken, warned the trawler group not to expect too much from the allocation (Stavanger Aftenblad, 12/12-00). With the proposal of the Resource Allocation Committee, the managing director in the South-Norway Trawler Association stated that the battle over the mackerel quotas was not over, in their view the trawlers should have 5 percent and not 3 as proposed (Stavanger Aftenblad 1/2-01). The leader in the South-Norway Trawler Association claimed it was not fair that the total quota of the trawlers were less than what some purse seine vessels alone had further north on the west coast (Stavanger Aftenblad, 6/2-01). In Fiskaren (31/3-01) the leader of the South-Norway Trawler Association stated that if the trawlers were to be heard during the Annual Meeting in the Norwegian Fishermen's Association, the Ministry would have to act. The trawler situation was addressed in Parliament (Fiskaren, 8/5-01). On May 9th Fiskaren reports that the Minister of Fisheries, Otto Gregussen, will not reallocate the mackerel quota, at least until after the Annual Meeting in the Norwegian Fishermen's Association. The organisation for small seine vessels (Rederiforeningen for ringnotbåter under 70fot) also felt that they had lost out in the mackerel quotas. But the Minister stated that the allocation key had broad support in the industry (Fiskaren, 9/5-01).

In January 2001 the Norwegian Vessel Owner Association (Fiskabåtredernes Forbund) held a general assembly where the payment of resource rent were amongst the issues to be discussed with the Minister of Fisheries, Otto Gregussen (Labour party) present. Prior to this meeting, the general secretary of the Norwegian Vessel Owner Association, Audun Maråk stated that it would be out of the question to pay resource rent unless the fisheries policy was such that the profitability in the fleet could increase. Thus the quota share

should remain stable at the current level (Fiskaren 9/1-01). In January the report from the Resource Allocation Committee was published, and Fiskaren reported of an unanimous Committee and a content leader of the Norwegian Fishermen's Association stated that the Norwegian Vessel Owner Association would no longer have reason to leave the organisation (Fiskaren, 31/1-01). According to Fiskaren, the purse seine vessel owner's stated that they could not spare even one fish, and their organisation threaten to leave the Norwegian Fishermen's Association in favour of NHO (who organises Norwegian employers). The Norwegian Vessel Owner Association said it would do so unless the proposal by the Resource Allocation Committee was accepted on the Annual Meeting (Fiskaren, 3/10-01). The Norwegian Vessel Owner Association was during the Annual Meeting reminded that there are no private property rights to the fisheries resources (Fiskaren, 15/10-01).

On December 27th 2000 Fiskaren reported the reduction of maximum quota in the coastal mackerel group would mean a reduction of 125.000kr to the crews on the small vessels. After the report from the Allocation Committee had been published, the Committee leader Johannes Nakken said that though it was a new principle to have set quotas the division of the coastal into more homogenous groups would be more fair (Fiskaren, 31/1-01). On October 3rd the region south group (Fiskarlaget Sør) puts forward the demand of 20 percent to the coastal group, they accuse fishermen from the purse seine fleet of being greedy by fishing in the coastal group on their spare time (Fiskaren, 3/10-01). The county group organisations were also faced with threats of members leaving the Norwegian Fishermen's Association. According to Fiskaren, the coastal fishermen had ambitions for reallocation for the 2001 Annual Meeting (Fiskaren, 10/10-01). A representative for Fiskarlaget Sør, (Region south) claimed during the Annual Meeting that the coastal fishermen were punished for the over-fishing done by the purse seines. Implying that despite technological advances in the trolling fishery they were not given the opportunity to improve their effectiveness due to the quota situation that had been brought on by the technological revolution in the purse seine fishery in the late 1950s(Fiskaren, 15/10-01).

The Resulting Allocation Key

October 17th Fiskaren could report the final compromise. The resulting allocation key is presented in figure 5.3:

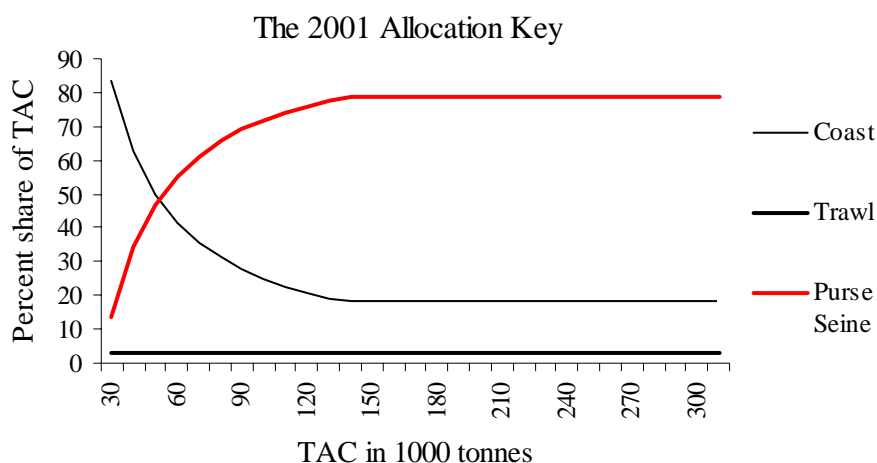


Figure 5.3. The 2001 allocation key for the mackerel fishery. Based on the percentage shares from the Annual Meeting. For the coastal group, the quota is not to be less than 25.000 tonnes. Coast 18,5%, trawl 3%, SUK 8,2% of the purse seine quota 78,3%.

The new key implies that all group quotas will follow variations in the national TAC (Total Allowable Catch). Prior to the new key, the coastal percentage in 2001 had been 17 percent with a quota of 30.000 tonnes. According to Fiskaren (17/10-01) with the same quota and price on mackerel the coastal group have gained 18 million kr, and the trawlers 12 million meaning 30 million less for the purse seines. The purse seine and SUK vessels fished mackerel for a value of approximately 1 billion kr in 2001. In 2001 96 purse seine and 20 SUK vessels participated in the 2001 mackerel fishery (Fiskeridirektøren, 2001).

The debate that had been evident in the media gave another impression that what the Minister of Fisheries, Otto Gregussen had, it seemed that there was not as broad support for the proposed allocation key as he expressed. Much of the debate was also concerned with the representation and positions of groups within the Annual Meeting and the Executive Board. The Norwegian Vessel Owner Association wanted more representation in both. Their argument was that their members contributed with 60 percent of the financing (Fiskaren, 3/10-01). The mandates for all representatives were thigh, and therefore it seemed that the Norwegian Fishermen's Association was threatened by

fractionating. The Norwegian Vessel Owner Association put forward an ultimatum and said the limit was 1 percent of the mackerel quota, the majority suggested 18,5 percent (1,5percent) to the coastal group (Fiskaren, 15/10-01). On several accounts, the representatives were encouraged to overcome their differences (see Fiskaren 10/10-01). The Fisheries Director stated that a fractionating would mean that the bureaucrats would be dominating the management (Fiskaren, 15/10-01) implying less influence to the fishermen in the decision-making system. According to the editor in Fiskaren, the representative from the trawler interests who were the only two of the 64 representatives to vote against the proposal did not represent a threat to the unity of the Norwegian Fishermen's Association (Fiskaren, 17/10-01). According to the editor in Fiskaren, the organisation of the Norwegian Fishermen's Association would benefit from a more functional organisation and larger regions. The development in the decreasing numbers of fishermen has lead to some county branches to have less autonomy, and because the fisheries become more specialised (Fiskaren, 3/10-01). As the numbers of members in the county branches are decreasing, the representational principle becomes an issue. In the current organisational structure, several groups will feel powerless, territorial and functional. The trawlers signalled that they would use their political affiliations a new battle over the mackerel quotas (Fiskaren, 17/10-01). At the end of the Annual Meeting, a new government had been formed, a coalition of the central and conservative parties. The new Minister of Fisheries, Svein Ludvigsen was appointed from the Conservative Party. The prior Minister had stated that he would respect the new allocations, but in March he had also said that he would not consider any reallocation till after the Annual Meeting. The Fisheries Director stated in Fiskaren (17/10-01) that the fishermen had through the new allocations been able to speak with one voice which gave the allocation keys legitimacy, and that he intended to follow through the recommendations. The new Minister sent the keys to the Parliament in the intent of locking the allocations between the fleet segments for the next seven years. This will according to the reporter in Fiskaren make it more difficult to intervene like the Minister, Peter Angelsen, did in 1998 (Fiskaren, 11/1-02) According to Minister of Fisheries, Svein Ludvigsen, a locking of the key would reduce the political pressure. That would according to Fiskaren imply that the Minister of Fisheries, Svein Ludvigsen, has relieved himself from the opportunity to change the quota allocations. Changes would have to go through Parliament (Fiskaren, 11/1-02). Earlier in December 2001, a preliminary statement from Peter Ørebech in his

work for the new Maktutredning (an analysis over power relations in the country) was that it was the Norwegian Vessel Owner Association that controlled both the Minister of Fisheries and the Fisheries Director (Fiskaren, 7/12-01).

Chapter 6: From open access to regulated access in the coastal mackerel fishery

The development in the coastal fishery

The numbers of vessels participating in the coastal mackerel fishery from 1980-1994 had significantly decreased. The number of vessels under 21,35m using conventional gear had reduced from 1534 to 380 in 1994. This was also the trend in the coastal seine vessels (Norges Fiskarlag, 2001)⁹. In 1991, the Resource Allocation Committee predicted that as a result of the closure in the cod fisheries the pressure in the "herring fisheries" would increase. Thus, the closure of the cod fisheries would have a domino effect (Norges Fiskarlag, 1991). However this cannot be said to have affected the coastal mackerel fishery even though there was a slight increase in the coastal seine vessels in 1990. Figure 6.1 shows the development in the participating vessels in the different coastal groups.

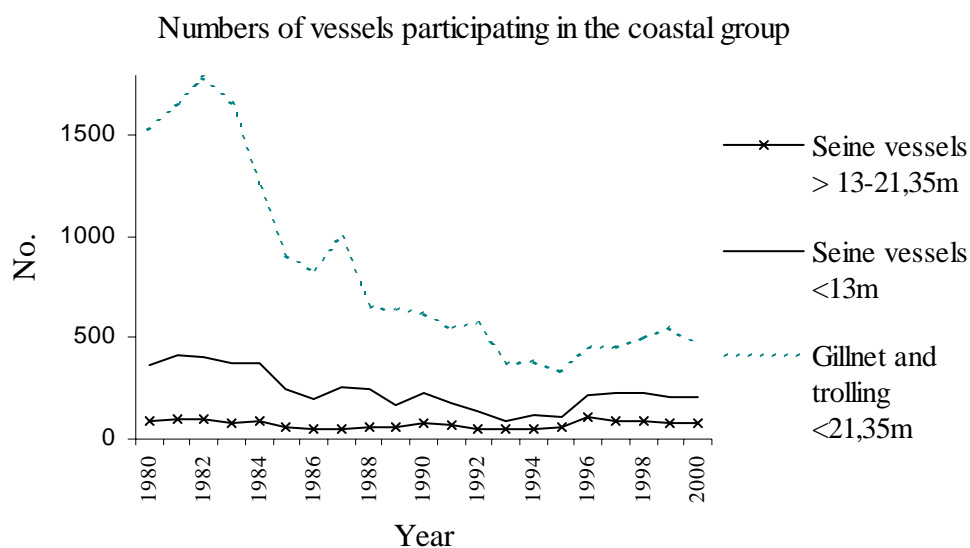


Figure 6.1 The development in participating coastal vessels, 1980-2000. The numbers for the gillnet/trolling and seine under 13m is somewhat too high as several vessels participate in both fisheries.

In the 1980s gillnet and trolling vessels took most of the coastal catches, but by 1988 the larger seine vessels surpassed in catch size. Gillnet and trolling catches were steadily declining until 1994, in 1993 these vessels caught only 1787 tonnes. The total catches in the coastal mackerel fishery was in the period of 1990-1994 been between 21.000-15.000 tonnes. From 1994, there was an increase in participating vessels in all groups. The

Annual Meeting in the Norwegian Fishermen's Association in 1994 had opened for the possibility of the limiting access in the coastal seine group under 70 feet, the reason being to limit increased participation in this group (Norges Fiskarlag, 2001). But from the numbers observed in the figure (figure, 6.1) there was no real increase of participating vessels. However, what had increased was the share to the Northern Norway counties (see figure 4.3) where almost all mackerel is fished by seine vessels larger than 28m (see chapter 4). At the time (1994) the profitability in the pelagic fisheries was low, operating margin¹⁰ for vessels over 13m was in 1993 less than 5 percent¹¹. With the price support under the Main Agreement being abolished in 1994, it may seem that the competition for the catch would increase. Limited access was in the 1994 report only discussed in general terms as a means to avoid economic over fishing (Paulsen and Steinshamn, 1994). In 1996 the "Hallenstvedt-report" concluded that there was no over capacity in the coastal seine fishery, and as a result the 1996 Annual Meeting in the Norwegian Fishermen's Association decided that there was no need to limit access for the coastal seine fleet (Norge Fiskarlag, 2001). In 1995 the only requirement to participate in the coastal mackerel fishery was that the fishermen and vessels were registered. Until 1995, the quota to the coastal fleet was stipulated, and not a set group quota. However, the decision in the 1994 Annual Meeting in the Norwegian Fishermen's Association was that the vessels using traditional gear would be allowed to continue the fishery even after the group quota had been caught (Norges Fiskarlag, 2001).

Positioning

In 1996, the numbers of participating vessels increased to 620 coastal vessels in total. In 1995 only 409 vessels participated. This year the average price for coastal caught mackerel was 5,57 against 3,12 the previous year¹². According to Pehrson and Ramsli (1998) the market situation for coastal caught mackerel seemed to be improving. Previously this mackerel had been mainly landed for domestic consumption where only minimum prices was achieved, in 1996 more of the coastal mackerel was landed for the better paying export market (Pehrson and Ramsli, 1998). According to the Norwegian Fishermen's Association (2001) good accessibility, high prices and the prospect of

⁹ From table 5.21 in the Report from the Resource Allocation Committee, 2001

¹⁰ Operating margin=(operating result/operating revenues)*100. 5% operating margin means that for each 100kr sold, 5 kr is earned in profit

¹¹ Fiskeridirektoratet (2000) Number from figure 12B, p 28

limiting access was the reason for this situation. Though perhaps accessibility for the coastal vessels was good, the total quota of North East Atlantic mackerel was significantly reduced from 1995-1996 (Iversen, 2001). According to the Herring Sales Organisation, the markets in Asia were very interested in the Norwegian mackerel (Norges Sildesalgslag, 1996). According to Pehrson and Ramsli (1998) the positioning in the coastal group was underscored by the positive price development. Though the gillnet and trolling fishery had been excepted, the catch in the coastal group had only surpassed the group quota in 1994 prior to the events in 1996 and only by 1000 tonnes. Then the Minister of Fisheries stopped the coastal fishery for all groups in September (Norges Fiskarlag, 2001).

Towards final closure

When the Minister of Fisheries, Jan Henry T. Olsen (Labour party) closed the coastal fishery including for the traditional gillnet and trolling fishery the Norwegian Fishermen's Association protested. According to the Fishermen's Association this was a breach of promise and argued that the decision should not be made in an extraordinary situation, but the Norwegian Fisherman's Association was unsuccessful in their attempt to alter the Ministers decision (Norges Fiskarlag, 2001). When asked for the reason and what the Minister would do in the following year with the difficulties that this closure had posed in the coastal fishery the reply was that the increased effort in this group had in fact lead to an over fishing (Stortingets spørretime, 1996). Furthermore the Minister said that the 30 percent reduction in the total TAC (Total allowable Catch) the EU and Norway had agreed on had in full been carried by the purse seine fleet since the coastal group did not have their 20.000 tonnes quota cut. The Minister interpreted condition for continued fishing in the gillnet and trolling fishery that the fishing pattern in this group did not change. With the increased participation in the coastal groups the Minister felt he had no choice than to stop the fishery. He further said that this group had fished significantly more than they had the previous year, and due to the high prices achieved there was no reason to complain, as the profits now would be three times high as the previous year. Norway as a responsible fisheries nation could not permit deliberate over fishing (The Minister of Fisheries in Parliament 11/10-96, Stortinget). According to Pehrson and Ramsli (1998), the stop in the traditional fishery lead to a discussion referring to the quota

¹²Government of Norway (1998) Price from St.Meld 51, Appendix 3, Table 3.9

allocation that was decided in 1994. As a result of the events in the 1996 fishery, the Norwegian Fishermen's Association divided gillnet and trolling vessels and the traditional coastal seine into a separate group from the remaining coastal seines in 1997 (Norges Fiskarlag, 2001). In July 1997 the Department of Fisheries implemented a limitation in access in the coastal seines over 13m after a discussion with the industry. The Norwegian Fishermen's Association was opposed based on that there was no over capacity in the coastal seine group (Norges Fiskarlag, 2001). The Boat Owners Association expressed content with this development towards limited access, but expressed that it was not sufficient (Fiskebåtredernes Forbund, 1997).

The Norwegian Vessel Owner Association had during a meeting in august 1997 discussed the limitation of access in the coastal mackerel fishery. The decisions made during this meeting were that the Norwegian Vessel Owner Association would continue their work toward limiting the access in the coastal mackerel fishery. This was found necessary to avoid increased participation and pressure on the quota allocation (Fiskebåtredernes Forbund, 1997). The situation in coastal mackerel fishery did lead to an increased pressure on the allocation. The Norwegian Fishermen's Association had to renegotiate the group quota after requests by members groups, and the group quota was set to 25.00 tonnes (see chapter 5). In 1998 the Executive Board endorsed a limited access for the seine vessels over 13m, but wanted the criterion to be that they had to have participated at least in 2 of the previous years and landed at least 25 percent of their quota (maximum quota) (Norges Fiskarlag, 2001). In view of the Boat Owners Associations discussions in 1997 where the Executive Board in this organisation expressed surprise that the Norwegian Fishermen's Association had in July 1997 criticised the government for the limited access. The with the change in the tone of the Norwegian Fishermen's Association Executive board in 1998 it seems to have been influenced by the Norwegian Vessel Owner Association.

The Executive Board of The Norwegian Fishermen's Association opted for a limitation also for gillnet and trolling vessels over 13m. The Department did not limit the access in this group in 1998, but tightened the criterion for participation in the coastal seine vessels over 13m (Norges Fiskarlag, 2001). The limitations for gillnet and trolling vessels over 13m were however implemented by the Department in 1999. In 2000 the coastal mackerel

fishery with exemption of the coastal seine vessels over 13m, the fishery lasted from august 14th to September 6th, as a result the coastal fishery was characterised by high competition and chaos (Norges Fiskarlag, 2001).

The situation in the coastal mackerel fishery had been unsatisfactory after the 1994 allocation and with the decision in Annual Meeting in the 1996 (no limitation in participation), a work group had been appointed in 1998 to address the issues concerned with the coastal fishery. The considerations to be taken was the quality of the fish, the income of the participating vessels and that the participating vessels could use their access right in the most rational manner. The conclusion was that it would be impossible to come to realistic and reasonable changes in the regulations for the coastal fishery when the quota was at a maximum 20.000 tonnes (Norges Fiskarlag, 2001). As a consequence of the increased quota that was taken from the purse seine fleet, with the following quota increase from the Minister in 1998, some purse seine owners left the organisation (Norges Fiskarlag, 2001).

As the only means to decrease the capacity in the coastal fisheries, the Resource Allocation Committee was the closing of the “commons” (Norges Fiskarlag, 2001). Thus, the Committee wanted a closure in the vessels under 13m in the mackerel fishery. As a means to separate the participants, these would have to have participated in one of the three previous years. Participation in 2001 did not qualify (Norges Fiskarlag, 2001). In January 2001, the department had sent the proposal out on “hearing”. The Department of Fisheries implemented this limitation for the 2002 mackerel fishery.

Chapter 7: Summary and Discussion

At this point it is appropriate to return to the research questions that were posed in the introduction and sum up briefly. This is followed by a discussion of the thesis objective, which was to better understand the processes leading to the current allocation key and the closure of the coastal mackerel fishery, and from that make some concluding remark about the nature and implication of the Norwegian approach to fisheries management.

Summary

The first question posed is related to the rationale behind the allocation keys, why were the allocation keys introduced in 1994 and in 2001? From the 1980s (see fig 4.1) the Total Allowable Catch (TAC) had varied, in 1988 the TAC was at a level of 141.000tonnes and by 1994 the TAC was 248.000tonnes. Three different fleet groups were fishing on the same TAC, the offshore purse seine fleet (including the SUK vessels), the trawlers and the coastal fleet (coastal seines under 21,35m and gillnet and trolling vessels under 21,5m). Prior to 1994 the allocations between the fleet groups were decided in annual negotiations. In the 1980s the percentage share of the TAC to the coast and offshore fleet varied considerably (see figure 3.1), and a need for more stable conditions for both the fishermen's income prospects and in within the Norwegian Fishermen's Association was desired (see chapter 4, concerning the allocations discussed in 1991). Prior to 1990 the vessels operating in the pelagic fisheries had negative operating margins, and as the European Economic Area agreement was implemented in 1994 the need for an economically self-sufficient fishing fleet became more pressing. The fishery had gradually gone from being a subsidised industry to an industry that needed to focus on economic efficiency. By using TAC to limit harvest levels, allocations on different vessel groups is natural consequence. Without some allocation between the fleets, it would be no difficulty for the purse seine fleet to fish the entire TAC. A natural division would be between the fleets that had developed over the years. A long-term allocation key was desirable both from an economic perspective and in order to calm down the allocation discussions within the Norwegian Fishermen's Association. It was regarded necessary to take the allocation key up for revision after some years, in order to account for developments in the resource base and price changes. In addition, the allocations should not be of such duration that the common property regime could be questioned. The

planned revision was in 2001. The resulting key would reflect the conflict that revolved around the 1994 allocation key.

Second, I asked why the authorities did not follow the proposed keys. The answer lies partly in the development in quotas and in the development in the value of the fishery. From 1994 to 1995 the TAC (Total Allowable Catch) decreased from 248.000 tonnes to 200.000tonnes in 1995. By 1996 the TAC was at only 133.000 tonnes, a 66 percent reduction from 1994. The prospect for the fishery in terms of quantity was not uplifting. With this reduction of the TAC, the coastal group quota of 20.000 tonnes remained stable, and the purse seine fleet had their quota reduced in accordance with the allocation key. In addition to the group quota, the traditional coastal fishery (seine vessels under 13m and gillnet and trolling vessels under 21,35m) could continue to fish even after the group quota was taken. The Ministry of Fisheries (Jan Henry T Olsen, Labour party) stopped this practice in 1996. Though the quotas had developed in a negative direction, prices had increased and there had been some increase in the participants in the coastal fishery in 1996. Frustrations from coastal fishermen was evident, in political circles there was also an impression that the allocation key had not benefited the coastal mackerel fishermen (Fiskaren, 14/10-97, Stortingets spørretime, 3/6-97). As a consequence the Minister of Fisheries (Peter Angelsen, Senterpartiet) increased the coastal mackerel quota to 30.000tonnes for the fishery in 1998. The Norwegian Fishermen's Association had internally decided a quota of 25.000tonnes for 1998 and had thus deviated from its own recommendations through the 1994-allocation key. This increased quota was not received well in the Norwegian Vessel Owner Association, who reacted by severely criticising the Minister of Fisheries. The Minister in response expressed surprise over such fierce reaction. In his view the purse seiners had more than sufficient shares of the herring (58 %) and the mackerel (85 %) quotas. The Minister pointed out that the he was interested in a long term allocation, but that the coastal group also should have the opportunity to take part in the increased profitability of the industry (Fiskaren, 30/12-97). In short, the allocation key of 1994 was by the Minister and in political circles considered biased, disfavouring the coastal fishermen in an industry where profitability was increasing (see figure 5.1).

The third research question was what the results were in actual quota allocations and catch. Though the coastal group had their quota increased from 20.000 tonnes to 30.000 tonnes from 1998 and onward, the increase was only minor deviations from previous years. The coastal quota was in 1998 increased from 15percent in 1997 to 19,1 in 1998 and 1999. But in 2000 the quota was only 17,4 percent. These minor increases came from the purse seine quota. The share of the catches followed the actual quotas. In reality, increasing the group quota by 10.000tonnes was only a marginal adjustment from the 1994-allocation key (see figure 5.2 and 4.4). The adjustment hardly constituted as any significant change in political direction. The reactions from the Norwegian Vessel Owner Association demonstrated how volatile the situation could be if the authorities altered the compromise the Norwegian Fishermen's Association had worked out. The same situation was observed during the 2001 Annual Meeting where the threat of fraction was evident. This was considered beneficial by the authorities as the political cost was seen as too high. Being the Minister of Fisheries that led to a dissolved Norwegian Fishermen's Association would not go down in the history books as a hero.

Finally, the question of why the coastal mackerel fishery was closed is addressed. Limited access had been an economic regulation used in the offshore purse seine fishery since 1973, the trawlers were also limited according to a registration scheme. With the cod fisheries being successfully closed in 1990 as a response to the cod crisis (see Hersoug et al, 1999), this lead to a precedence for the other fisheries. In 1991 when the long-term allocations were discussed, there was a concern that fishermen who had also fished in the cod fisheries but was no excluded would increase their efforts in the pelagic fisheries (Norges Fiskarlag, 1991). As the purse seine fishery already had been limited, the only fishery open for expansion was the coastal fishery. For the Norwegian Vessel Owner Association, limiting the access in the coastal fisheries was highly prioritised on their agenda (Fiskebåtredernes Forbund, 1997). An increased catch in the coastal mackerel fishery would be drawn from their allocated quota. Though the Norwegian Fishermen's Association first had withdrawn from their support of limited access in this fishery, the organisation changed direction after 1997 when the limited access was implemented for the coastal seiners over 13m. The first development of limiting the access in this fishery was when the Minister of Fisheries closed the fishery in September 1996. There was a situation of positioning, and the Minister of Fisheries argued that the practice of permitted

over fishing was not that of a responsible fisheries nation. It is clear that the Norwegian Vessel Owner Association was actively pushing for this development. There were chaotic conditions under the coastal mackerel fisheries, a typical exhibit of "race to fish". The motive of the Norwegian Vessel Owner Association was clear, and the authorities' view was that continued open access would lead to undesirable conditions during the fishery. Hence, what was started as limited entry for the purse seines in 1973 ended up with the 2001 allocation key and closing access to the coastal mackerel fisheries. Approximately 95 % of the total TACs are now closed for new entrants.

Discussion

Introduction

The objective of this thesis was to better understand the processes behind the development in the mackerel fishery towards allocation keys and limited access in the coastal fishery. In this section the observations from the mackerel case is discussed in light of the theoretical aspects presented in chapter two. Based on this discussion I aim to make some concluding remarks on the approach to fisheries management in Norway.

Legitimacy is according to Jentoft (2000a; 144) "a premise and not only an outcome of a management system". Thus a management system may be evaluated according to the perception of legitimacy related to it. The external legitimacy of the system may be different from the internal perception of legitimacy. Though many different stakeholders may be identified, only those who acquire attributes of legitimate claims, power and urgency are likely to be definite stakeholders and thus be participants within the system. Furthermore legitimacy may be evaluated according to procedure or content. It is a common notion from democratic theory that a person that may not agree with the outcome of a decision is more inclined to accept if he or she has the opportunity to communicate his opinion (Jentoft and Mikalsen, 2001). This implies that procedural legitimacy may compensate for a lower perception of content legitimacy. According to Jentoft (2000a), if the parties perceive legitimacy as low, two affected reactions may unfold where voice is preferred to exit if there is room for communication. In the case of the mackerel fishery "voices" have certainly been loud, while "exit" has been limited.

Insufficient content or procedural legitimacy?

The allocation keys may be considered an attempt in which the conflicts between the fishermen could be resolved. This was clearly stated in the report from the allocation committee in 1991. In this account the principle of using historical catches was posed as suitable for providing a least controversial allocation key. Paulsen and Steinshamn (1994) repeated this in the assessment in 1994. The basic idea was that using historical catches would yield legitimacy. This account may be related to that of content, in that some pre-established standards and demands will yield legitimacy (Jentoft and Mikalsen, 2001). However, what is strikingly clear from the case of the mackerel fishery, is that these standards and demands are weighted against different notions of what is considered rational, reasonable and just for those who are affected by the allocation keys; fishermen are far from being an homogenous group. The time frame of 10-15 years in which historical "rights" have been established seems unfair to those fishermen in a fishery that have roots much further back in history. However, what is rational may be to assign allocations according to the current situation, as Paulsen and Steinshamn (1994) points out, the total fleet composition, resource base and activity patterns have changed significantly over the last decades. But the market situation and price development have also changed in the mackerel fishery turning it into a lucrative enterprise. Was it then reasonable to use the historical catches for the allocation of a fishery that is now worth more than a billion in first hand value to only benefit a few? As Jentoft and Mikalsen states (2001), legitimacy is more a function of expectations, plans and goals for the future than the result of traditions and passed actions. The expectations prevailing in 1994 may not have been so optimistic as they would be only a few years later. The EU referendum ended with a no, and the diminishing financial transfers in form of price subsidies were not as devastating as could be expected in 1994. Though the development of the TACs seemed discouraging, and in fact was reduced in 1996, the price increased more than outweighed any loss in actual catch. What might have been acceptable in 1994 for the coastal fishermen, a guaranteed quota of 20.000 tonnes regardless of the variations of the TAC (Total Allowable Catch) suddenly became a limitation for opportunities. Also the prospect of "permitted" over-fishing, for the gill-netters, trollers and seine vessels under 13m, may have sweetened the pill. However, the accepted over fishing was no longer perceived as legitimate externally. The account by the Minister of Fisheries in Parliament on October 11th 1996 clearly expresses such a notion.

It may seem that the procedural legitimacy created more discontent than the actual contents of the allocation keys and the limited access. The Norwegian Fishermen's Association had during their Annual Meeting in 1996 reconsidered the need for limiting the access in the coastal mackerel fishery (Norges Fiskarlag, 2001). However, the Executive Board in the Norwegian Fishermen's Association altered its position again in 1998, and actually wanted a more strict regulation than what the Department of Fisheries had implemented (Norges Fiskarlag, 2001). That the Norwegian Vessel Owner Association had during its Annual Meeting in 1997 expressed more or less the same view may be interpreted as an increased acceptance for its view on the issue. The decision in the Executive Board thus directly countered the decision that was made under the Annual Meeting of 1996. Both allocation keys came about as compromises, where the pressure on the organisation for a united Norwegian Fisherman's Association was high both internally and externally. Much of the problem is related to the representation of conflicting interests internally in the Norwegian Fishermen's Association. Prior to 1964, the Norwegian Fishermen's Association consisted of regional branches, and thus representation was territorial. However, functional group organisations such as the Norwegian Vessel Owner Association had repeatedly contested the exclusive role that the Norwegian Fishermen's Association had in the annual negotiations over financial transfers under the Main Agreement (Norsk Fiskerinæring, 2001). As a consequence, the Norwegian Fishermen's Association would from then on have two principles for representation, functional and territorial. According to Hoel et al (1991) the differences between interests pertaining to region, technology and economy makes the Norwegian Fishermen's Association a fragile coalition. According to Hoel et al (ibid) the functional groups are able to compensate for their minority status by overlapping membership and by retaining autonomy and administrative capacity. In addition, the Norwegian Vessel Owner Association contributes to 60 percent of the Norwegian Fishermen's Association's finances. In 1997, the fishermen's sales organisations' financial contributions were reduced after a verdict in the Supreme Court (Norges Sildesalgslag, 1997). In 2002 the Norwegian Vessel Owner Association organises 35 enterprises and 298 vessels (www.fiskebaatreder.no, 2002). They have a representation in the Executive Board of 27,3 percent, and 17,3 percent at the Annual Meeting (Fiskaren, 3/10-01). According to Hoel et al (1991) the Executive Board dominates the processes within the Fishermen's Association. That small-scale coastal

fishermen feel alienated in this context should be no surprise. An alternative organisation may be the Norwegian Coastal Fishermen's Association, but at the time this organisation have only observational status in the Regulatory Council. According to Jentoft and McCay (1995) representation must be balanced in a manner that decisions can be made that all can agree on, and which gains support within the respective constituencies and the various groups of fishermen are given a relative share of the decision making process. What principle should thus dictate the relative share of representation? It is tempting use Rokkans expression “votes count but resources decide”. Not only may this cause considerable problem for internal procedural legitimacy, considerable influence in an organisation based on what accredit to power may be perceived as dubious externally also. According to Jentoft (2000b) representation that is territorial rather than functional is likely to have a decision making process that is less characterised as a zero-sum game. Then regional instead of group quotas could yield more room for manoeuvring. However in the case of the mackerel fishery, it is not likely that a territorial representation would rectify the bias the strong functional representation yields (see figure, 4.3). Another alternative may be that of broadening the participation in the co-management arrangement. Broader participation has been discussed by academics (see Mikalsen, 1998). At least it could be wise to ensure that the coastal fishermen get a relative share of the representation in the Regulatory Council through the Norwegian Coastal Fishermen's Association.

Concluding comments:

As the established allocation keys will guide the future developments of the industry both in terms of the type of fleet and fishery Norway will have, the content and procedures are of interest to other stakeholders as well. However, though the situation for the coastal fishermen may receive political sympathy it may be useful to repeat Jentoft and Mikalsen's (2001), statement: legitimacy is more a function of *future* expectations, plans and goals than the result of traditions and passed actions. There is no doubt about the ambitions of the larger vessel owners. They would like to restructure the industry, independently of political influence. On the other hand the small-scale operators in the coastal fleet are also increasingly devoted to economic efficiency. Co-management within the “family” will hence concentrate on a long-term allocation, which is now determined for the next 7 years. The question that is still open for debate is whether this system will

be accepted in the wider circle of stakeholders. Thus the external legitimacy of the allocation key may still be questionable. The issue of payments for exclusive rights is therefore e just around the corner. Stable conditions, in particular political, may therefore be something of an illusion, even if the annual allocation battle is now history.

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