Fisheries Management and Enforcement in a Danish perspective

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Abstract

The paper describes the fisheries management and enforcement system in Denmark. Denmark is a member of the European Union (EU) and therefore subjected to EU policies. The paper examines the organization of the Danish enforcement institutions and portrays how the inspection is carried out in practice. The paper describes the different sanctions in the event of infringements and finally the paper summarizes the main problems of the present enforcement regime.

Introduction

Claims of overfishing, misreporting of catches on one hand and the fishermen on the other hand arguing, that the present fishery regulation makes legal fishing impossible. For some time all this have caused discussions in Denmark on appropriate regulation and enforcement measures, including a debate on how management systems can be improved. There are two methods to change the present situation, either by strengthen enforcement activities or introduce new management schemes in order to secure a better compliance of regulations. E.g. other regulation measures as effort regulation or by having fishermen more involved in the decision-making process.

However, the major problem in Denmark is that quotas are reduced without reducing fleet capacity proportionally, which creates over-capacity and low profitability in the fleet (Raakjær Nielsen 1992a and Jøker et. al 1994). Furthermore, the general reduction in fish prices on the European fish market has aggravated the economic situation for many fishermen and several fishermen are brought on the brink of bankruptcy (Raakjær Nielsen and Jøker 1993 and Jøker et al 1994).

During the years 1993-95 the authors have interviewed more than 100 Danish fishermen about their attitude towards the present Danish fishing regulation. These interviews state that the fishermen are dissatisfied with the quota system and find themselves forced to by-pass the regulation in order to sustain in business. The fishermen are not happy about the situation and they wish to be able to fish legally and no longer have to act like criminals, and advocate for a regulation based on effort control, e.g. days at sea regulation.

On the other side the Danish Inspection Service finds itself in a situation where it is constantly forced to use more drastic measures to ensure that the law is obeyed.

It is obvious that this situation cannot continue, besides the fact, that it seems not logical to increase control and enforcement of an inappropriate fisheries regulation especially if the consequence will be that fishermen will go bankrupt. In addition transaction costs will expand dramatically.

This article aims at giving an overview of the present framework of Danish fisheries management and enforcement and hereby to enlighten some of the major problems. The authors participated in a study on resource management and control in the Nordic countries, financed by Nordic Council of Ministers, and headed by Abraham Hallenstvedt. Parts of the article have been published, although in Danish, in this relation (Nordic Council of Ministers, 1993).

Description of the fisheries management framework and the control system

In recent years the Danish regulation system has gradually developed towards the present system. Following principles are generally applied for regulating the fishery in 1995¹:

- C The yearly quotas are in general distributed for each fishing area as percentages over periods of time, most often as quarterly quotas, but with a longer or shorter time period.
- C Rationing in form of maximum catch volumes per period of time, from one to two weeks rations in some fisheries aiming at allocating 2 months rations in order to improve the planning possibilities for the fishermen. Maximum catch volume is determined according to the length of the vessel.
- C In pelagic fishing (Herring and mackerel) in the North Sea and Skagerrak the vessels are allocated an yearly basic catch volume, which can be increased if the fisherman can prove that minimum 70% of that is caught and 80% hereof is sold for human consumption. In the cod fishery in the Baltic Sea the fishermen can either choose to obtain an yearly catch volume or to be regulated by maximum catch volumes per half month. (However, after 6 weeks of fishing in 1995 fishermen regulated by maximum catch volumes per half month have utilized their share of the Danish quota.)
- C Individual vessels permits (licences) for certain fisheries and fishing areas, especially in the fishing waters of other countries.
- C Limitation on length of vessel and engine power for fisheries for certain species or fishing areas.
- C Technical regulation measures fish minimum size, mesh size, percentage of by-catch, gear limitations in certain fishing areas etc.
- C For certain fisheries advance reporting to the Inspection Service of arrival and unloading is required.

The influence of the control system on the Governments elaboration of the fisheries regulation.

The Danish fisheries regulation has been elaborated with a perspective to obtain a rational exploitation of the fishery resources. The elaboration of the fisheries regulation influence on, to what extend it will be complied with as the regulation reduces the fisherman's opportunities for development. The stronger regulation, the stronger incentive to bypass it.

Conservation methods which gives the fishermen a large flexibility is more likely to be complied with, but often at the expense of the conservation effect and hereby of the costs of future benefits. This balance between finding a flexible regulation and at the same time secure an

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Ministry of Agriculture and Fisheries Order No. 981 of 7. December 1994.

appropriate conservation is a very essential but also difficult problem. The aim of the Danish Inspection Service is to secure that both the EU and the national regulations are complied, i.e. to secure that quotas and provisions concerning rations are observed. The present situation, in which the fishermen's catch possibilities are continuously reduced, together with a growing burden of debt, has caused an increasing number of fishermen who try to bypass the quotas and misreport catch data.

On the other side the Inspection Service has expanded the control to the limits of its working force. The limitations and restrictions are increasing and has gradually grown to enormous dimensions for the fishermen. The latest initiative is that the Inspection Service can demand an advance reporting of arrival and discharge in order to reduce the fishermen's possibilities of reporting incorrect catch data.

The aim of the Inspection Service is to protect the fish stocks against overexploitation. From the fishermen's point of view the present regulation is a question of dispersing poverty as the quotas for some species are reduced quite dramatically. The fishermen often claim that the recommendations by biologist are wrong and the fishermen do not identify the observations made by the biologists regarding the size of the stocks. In Denmark there has been a rather excited debate on the issue especially in relation to the size of the cod stock in the Baltic and the size of the sole stocks in Kattegat and the North Sea.

The aim of the Danish Inspection Service has been to secure that the present fishery regulation is observed. It seems that both Denmark as well as the EU has decided to carry through a more and more restrictive control in order to force the fishermen to comply with the present regulation. Another possibility could have been to change the regulation in a direction which makes it easier for the fishermen to comply with the rules and hereby make the work of the Inspection Service easier, and at the same time provides an improved utilization of the resources at sea.

Legislation

Through its membership of the EU, Denmark is subject to the Common Fisheries Policy (CFP). The regulation in Denmark is thus subject to legislation at:

- 1) EU level
- 2) National level

EU legislation

The CFP consists of the following main elements:

- C A resource and conservation policy
- C A structural policy
- C A market policy

The above 3 main elements are often seen as separate, but in practice they are connected. Each element contain a ranges of sub-elements. Monitoring and surveillance of the fisheries are integral parts of the resource and conservation policy. The control measures must ensure that the regulations adopted must be observed. Implementation of the control measures is delegated to the individual Member States under the supervision of the European Union. A special body of EU fisheries inspectors has been set up for this purpose. The control function comprises a number of surveillance measures where skippers of fishing vessels over a certain size (12 meters) are obliged to keep a logbook. Fisheries inspection is conducted in ports, at sea, and in certain cases, there is monitoring from the air etc. Within the Control Regulation there is a built-in system which constantly writes off catches of individual countries from quotas, so the Commission can stop the fishery when a country's quota or the total EU quota has been exhausted. The Control Regulation is laid down in the (EØF) No. 2847/93 Regulation.

However, the way enforcement is performed in the EU undermines the effectiveness of the management regime. By delegating the surveillance to Member State authorities the EC creates a situation comparable to what is generally known as "the Tragedy of the Commons". (Raakjær Nielsen 1994) The fishermen mistrust such a delegation, because they fear that the authorities of the other Member States enforce a less stringent control on their own fishermen who therefore have a chance to bust their quotas. (There have been several examples of quota busting in various Member States).²

The incentive to adhere to the regulatory measures is undermined and national governments often refrain from enforcing strict control on their citizens because none of the other Member States do.

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Commission of the European Communities, 'Report 1991 from the Commission to the Council and the European Parliament on the Common Fisheries Policy', Brussels, 1991.

Furthermore, the structural policy has aimed to increase productivity and efficiency in the European fishing industry including that of Denmark at the same time as the conservation policy cut back TACs to reduce fishing mortality. This contradiction has contributed substantially to present problems of fisheries management in the European Union (Raakjær Nielsen 1992b), due to the fact that a significant increase in fishing capacity was created, which put pressure on the fish stocks and place the fishermen in a situation where they are forced to by-pass regulations in order to sustain in business.

In general EU and Danish fisheries management are not seen as legitimate of the fishermen. Legitimacy can be improved by transferring greater responsibility to fishermen or by consulting them in management matters. In this relation representation and participation of fishermen in the decision-making process is important. However, the fishermen are not directly involved in decision-making in relation to EU policies. They are only consulted through their Euro-organizations, but the Commission is not obliged to follow their advice and frequently refrains from doing so, thus the fishermen have no real influence on decision-making in EU.(Hoel 1993).

Danish legislation

Danish legislation is laid down in several Acts, in relation to the regulation of the Danish fishery the following 3 are important:

- 1) The Salt Water Act.³
- 2) The Act on Administration of the EU Regulations Establishing a Common Structural Policy for the Fisheries Sector and the Common Market Arrangements for Fish Products etc.⁴ (EU Administration Act).
- 3) The Act Regulating the Fishery⁵ (Regulation Act).

The Salt Water Fisheries Act

The Act contains general provisions for the fishery in Danish waters. The conditions are laid down for obtaining permission to practice commercial fishery as a principal or secondary activity, as well as establishing marine aquaculture. The Act also contains provisions for protecting fish stocks by setting rules for allowable catch volumes and technical regulation (e.g. closed seasons, maximum engine power and minimum fish and mesh size).

⁵ Act No. 221 of 23 May 1979

³ Act No. 306 of 4 June 1986

⁴ Act No. 562 of 21 December 1972

The EU Administration Act

This Act authorizes the Minister of Agriculture and Fisheries to lay down the provisions necessary to ensure that Denmark carries out the decisions taken at EU level. A board is appointed to advise the Minister of Agriculture and Fisheries on the administration of these decisions.

The Regulation Act

In the Act regulating the fishery it is laid down that the regulation shall attach importance to:

"conservation and reproduction of living resources, rational, including seasonally optimal, exploitation of the resources, the relationship between available resources and the capability in the fishery, as well as economic and employment considerations within the fishing industry, the processing industry and other related activities, both generally and geographical regions affected."

The Minister of Agriculture and Fisheries has the authority to lay down guidelines for the fishery in the year ahead. (See p. 2 for details on the 1995 regulation). In addition, the Minister can allocate vessel licenses and lay down rules for their utilisation, and make the introduction of new capacity or conversion and modernisation in the fleet dependent on a special permit.

Notice of Fisheries Regulation Act

To assist the Minister of Agriculture and Fisheries in the administration of the provisions the Minister of Agriculture and Fisheries appoints an advisory board of 10 people (The Regulation Board). Under the Regulation Board a Capacity Board is appointed to advise the Minister of Agriculture and Fisheries in laying down guidelines for granting permission to introduce new capacity in the fleet, including recommendations in individual cases.

The Minister of Agriculture and Fisheries has authorized the Inspection Service to carry out the practical monitoring and control. The task of the Inspection Service is to attend to strict observance of the terms of the permits and licences given by the Minister of Agriculture and Fisheries.

The Salt Water Fisheries Act

Ensuring that the provisions in the Salt Water Fisheries Act are observed is the responsibility of the Inspection Service in the Ministry of Fisheries. The Inspection Service has the following authority, cf. the Salt Water Fisheries Act.

C ".. if deemed necessary, at any time on appropriate proof of identity, and without recourse to a court order, has access to fishing vessels, fish transportation vessels, and anywhere where algae, crayfish and molluscs or parts thereof are stored, transported and treated etc."

C ".. can carry out investigations, take samples or let samples be taken, carry out control weighing, obtain documentation or information, as well as notify orders and bans to the extent where and in those areas where it is deemed necessary for the inspection to carry out its duties."

The EC Administration Act

The Inspection Service has the following authority according to section 4(2) of this act:

"The inspection authorities have, as far as it is thought necessary, with appropriate identification, without recourse to a court order, access to material mentioned below with whoever must pay a fee according to rules laid down in accordance to the Act. The inspection authorities are entitled to inspect the stocks, company books, additional accounts, accompanying documents, as well as correspondence etc."

The inspection in practice

This chapter describes how the inspection is done in practice, and the formal framework is examined.

Inspection at sea

In Denmark inspection at sea is coordinated directly by the Ministry of Fisheries and aims to:

- c ensure that Danish fisheries legislation and international agreements are observed at sea
- C give assistance and guidance to fishermen carrying out the fishery, including information on rules, regulation and help to fill in reports on damaged gear etc.

The Danish Inspection Service employs 5 vessels for control tasks at sea. However, 4 of them are also equipped as rescue vessels.

The Inspection Service tasks carried out at sea are to monitor the fishery in Danish waters and among these to board fishing vessels in order to inspect catch, gear, logbook etc. The activities of the fishing vessels are observed and correlated with logbook data, so as to reveal any infringements.

Inspection on land

The Inspection Service is in charge of supervision on land. It carries out a spotcheck inspection of landings. The supervision is identical with that carried out at sea. Inspection on land takes place by spotchecks. Approx. 2% of all landings of fish for consumption and approx. 10% of industrial landings are inspected. The task of the Inspection Service is also to ensure that the fish landed meets EU standards with respect to sorting and quality.

The Inspection Service on land carries out a 100% control of the logbook reportings. There is an obligation to report all first landings of fish in Denmark. This information is correlated with logbook reports. This gives Denmark a 100% paper control.

Sanctions in the event of infringements

Sanctions and punishment

Sanctions for infringements are laid down in the 3 previously mentioned Acts.

As a rule, infringements of the fisheries legislation are punished by fines. Criminal acts involving money, e.g. misappropriated grants, can be punished by imprisonment of up to 4 years. In addition to these punishments illegal catches or gear used illegally can be confiscated. In addition, administrative sanctions can be enforced, such as withdrawal of permits and licences.

Sanction practices

For the fishermen the following general guidelines are in force:

1st minor offence	Written warning.
Repeated minor or larger offences	Fine is imposed, of an amount corresponding to $1/3$ of the net value of the illegal catch if the owner and the skipper is the same, and $1/4$ if the owner and skipper are two different persons.
Repeated offences	The fine is increased by 50% for each of the repeated offences within 2 years.

In the case of first hand sale and processing the following guidelines are applied:

1st minor offence	Written warning.
Other offences	Fine calculated as 50% of the sales value of the illegal fish and confiscation of 10% of the sales value of the fish corresponding to the estimated average profits.
Repeated offences	The fine is increased by 50% for each of the repeated offences.
Serious infringements and economical crimes	Can be punished by up to 4 years' imprisonment.

Main problems of the present management and enforcement regime

It is important to remember, that the content of the fisheries regulation has a major impact on compliance of regulation, as the regulations set limits on fishermen's behaviour. A restrictive regulation creates incentives for the fishermen to bypass the regulation especially in situations where the fishery is economically pressed and fishermen have no other alternatives for generating income. This is the case for many Danish and EU fishermen and contributes to the understanding of the present management problems.

In a fisherman perspective the present regulation is a question of dividing poverty, when the quotas are cut down. Furthermore, the present regulation often place fishermen in dilemma situations where they are either forced to react irrationally to comply the regulation or to discard dead valuable fish, which obviously is a waste. In addition the fishermen often believe, that the TAC setting for some species are too low. All in all this gives fishermen incentives not to comply with all regulations.

The tasks of the Danish Inspection Service have then become to secure that the regulation was obeyed, even though the regulation moves away from reality.

To illustrate the situation the following example is provided. In many fisheries the regulation is based on weekly og fortnightly catch rations, due to the fact, that the yearly quotas are rather small, this create a situation, in which the fishermen are only allowed to catch a minor amount of fish within the time frame of the ration. Hereby almost all Danish vessels are unable to undertake profitable fishing on legal fishing alone, but had the right to be on the fishing grounds. This created a situation where misreporting become more the practise than the expectation.

The fishermen claim, that everybody (including the Minister) were aware of fishermen catching more fish than they were allowed. The fishermen have got some support from members of parliament on their view point.

However, an intensive paper control from the Danish Inspection Service has resulted in large fines to many fishermen. The fact that fishermen have been caught on paper control several years after they were fishing illegal and not when they were actually doing illegal fishing have had an impact on fishermens behaviour towards non-compliance of the regulation. As the fishermen argue, they find themself encouraged to fish illegally, because the rules were not enforced and obviously the fishermen would have changed behaviour if they had been caught at the time when they were fishing illegally.

This example clearly illustrates, that the Danish fisheries administration has chosen to put more emphasis on enforcement than changing the present inappropriate regulation. Also EU have followed this path, as the new Control Regulation aims at a more effective and uniform fisheries control including increased cooperation in monitoring, and surveillance between Member States, stricter obligations on reporting catches, stricter rules for quota management, satellite surveillance of fishing vessels, more severe sanctions for Member States and greater authority for the Commission.

The authors are of the opinion, that increased enforcement will not alone solve the crisis of EU

fisheries management. Here the content of the regulation and participation of the fishermen in the decision and implementation process are equally important.

In this respect the authors are much in line with Report 91, Guidelines for the common policy 1993-2002:

"Greater involvement of the various actors in the adoption, implementation and monitoring of standards is essential for the effective implementation of the Common Fisheries Policy."

and subsequent:

"The principle of subsidiarity requires appropriate sharing of responsibility among the community, the Member States, the regions and fishery professionals."

Even though the guidelines from Report 91 are very wide, it seems evident that the Member States play the most important role in the decisions of delegating responsibility and authority. If the fishermen or their organisations will provide their willingness to take responsibility, it seems evident that what is needed now to try to improve the present regulation and thereby diminish enforcement, is political will.

Even though the EU-Commission recognize the importance of greater involvement of fishermen in the decision-making and implementation process, EU has not initiated any real attempts in this respect. Furthermore EU has proclaimed a 36% budget increase for 1996 on inspection and control costs. Thus, EU has chosen to increase control rather than trying to increase legitimacy of the applied regulation, although world wide experiences testifies, that such a strategy often creates more problems, and do not lead to a more efficient management regime.

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