# The closing of the Norwegian commons

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#### **ABSTRACT**

Norway has for years managed its coastal fisheries through a regime that for all practical purposes has acted as open access, that is, open for bona fide fishers. The trawling sector was closed already in the 1930s, and the large offshore fleet was regulated through limited entry licensing from the early 1970s, while the coastal fishers were free to enter up to 1990. At that time the serious crisis in the cod sector implied a strict vessel quota system, a system that has been extended after the crisis passed away and that is now gradually being expanded to all other important fisheries as well. Add to this that through central allocation keys the distribution of rights and quotas has been fixed for longer periods (at present up to 2007). From nearly open access Norwegian fisheries have in twelve years moved to a situation where more than 90% of the resources are allocated and defined as accessible only for a limited number of quota and right holders. While the process has been heavily disputed within the fishermen's organisations, the Norwegian Fishermen's Association has all along played its part and accepted the preferred solutions. The same seems to be the case for politicians and the surrounding society, although more critical voices are also heard, not least among the representatives of the small-scale operators and the part-timers. The main question is, however, to identify the driving forces behind this process. Is it an inevitable outcome of technical rationalisation, whereby each vessel has become technically more efficient over time, facing a limited resource (fixed TACs)? Or is it a result of a "bureaucratic plot" as claimed by some researchers, where the fisheries administrators have been intent on closing the fisheries for years and are now using the crisis to implement an administrative plan? Or could it be that the fishers themselves, through various co-management institutions like the Regulatory Council, have fronted the closing process in order to improve their own economic position? Whatever the explanation, there seems to be no way back and the article ends up discussing possible future scenarios.

## 1. INTRODUCTION: WHY NOT COPY NEW ZEALAND?

When New Zealand introduced its Quota Management System (QMS) based on Individual Transferable Quotas (ITQs) in 1986, it was part of what one of the main operators himself has termed a "blitz-krieg-approach", trying to move so fast that opponents will "not have time to mobilise and drag you down" (Douglas 1993). Although the system had been tried out in the offshore fleet from 1982 onwards and the whole fishing industry was thoroughly consulted throughout 1984-85, the main change was, by European standards, implemented within a remarkably short time. As pointed out by Hersoug (2002) the explanation is manifold, concentrating on New Zealand's extremely favourable conditions in terms of having a large exclusive zone with expanding catch possibilities off-shore, a relatively small fishing sector, weak in political and organisational terms, a strong unitary state with an extremely strong group of technocrats able to produce swift changes, and finally that the QMS appeared as a solution to a deep crisis. The QMS came "just in time!"

By contrast, Norwegian fisheries authorities headed by the Ministry of Fisheries tried to implement a similar scheme in 1989-91. It was also introduced in times of crisis, had a strong administrative backing and contained numerous references to the perceived successful outcomes of the New Zealand and Icelandic ITQ-systems. Nevertheless, this scheme was shot down politically and has not reappeared on the political agenda for the last 12 years. The aim of this article is to explain why, or more precisely, to describe how Norway entered a course trying to combine the strong economic demands for increased efficiency with the equally strong perceptions of open access, at least for the coastal fisheries. The following is an account of how Norway has "solved" the problem that "too many (efficient) fishers are chasing too few fish". It is an account of how antagonistic claims have been sorted out, and how the main actors have acted and reacted and how the whole idea of "common resources" has been changed accordingly.

Data are based on official accounts and more than 20 years of participation in the "regulatory circus", that is, the "imagined community" being involved with regulatory politics in Norway, consisting of fishers, processors, managers, politicians, researchers and journalists as well as representatives for various other stakeholder groups. The outline is simple: The first section deals with the theoretical under-pinning of the story, while the second briefly presents the Norwegian fishing industry. The third

describes the first attempts of closing the commons, while the fourth deals with the closing of the coastal commons in the 1990s. The fifth describes the "trawler ladder" and the use of long-term allocation keys while the sixth concentrates on the more recent proposals of restructuring the coastal fleet. The seventh tries to analyse some of the rather paradoxical results in terms of capacity, economic efficiency and employment, while the eight and last section wraps up the main arguments through a discussion of three alternative scenarios.

## 2. INSTITUTIONAL CHANGE AS A POLITICAL PROCESS

In social science approaches to fisheries management it has become commonplace to state that management takes place through institutions, and even more important, that changes in management regimes (like introducing ITQs or right based fisheries more generally) happen through the establishment of new institutions or change/modification of old. Recognising that there are many competing forms of institutionalism, what are the minimum defining criteria – what are we talking about? According to Peters (1999:18) there are at least four defining characteristics of an institution:

- It must be in some way a structural feature of society, be that formal or informal
- It must have some existence over time
- It must affect individual behaviour
- There should be some sense of shared values and meaning among the members of an institution.

With these defining characteristics in mind, there are a host of possible institutions in fisheries management, ranging from the formal Directorate of Fisheries to the informal network of co-operating fishermen fishing away from home. Institutions comprise complicated set-ups like *the scientific fisheries management institution* (including national as well as international research organisations, advisory boards, administrative as well as political entities) to simple management measures like "the trawler ladder", the distribution key allocating quotas between trawlers and coastal vessels. It is, however, a long and sad tradition, also in the social sciences, to treat management only from an instrumental point of view, that is, institutions are seen as rules circumscribing the individual fishermen. By using the more comprehensive definition of Scott (1995:33) we also include the normative and the cognitive aspects: "Institutions consist of cognitive, normative, and regulative structures and activities that provide stability and meaning to social behaviour. Institutions are transported by various carriers – cultures, structures and routines – and they operate at multiple levels of jurisdiction."

In our case we are most concerned with institutional change and with the establishment of new institutions. For the sake of simplification we shall therefore concentrate on two different institutional perspectives, one *instrumental* which is quite common among fisheries economists, and a more sociological perception of institutions as *embedded* in a larger social structure. Starting with the instrumental perspective there are differences in approach, e.g. between economists and political scientists. Both will, however, be concerned with the manipulation of existing institutions and the design of new ones, like setting up ITQ regimes. Most often they will rely on some form of rational choice theory. Underlying this instrumental approach to institutional design and implementation is according to Peters (1998: 44): "that utility maximization can and will remain the primary motivation of individuals, but those individuals may realize that their goals can be achieved most effectively through institutional action, and find that their behaviour is shaped by the institutions". Thus, in this view, individuals rationally choose to be to some extent constrained by their membership in institutions, whether that membership is voluntary or not.

Institutions are consequently seen as sets of positive (inducements) and negative (rules) motivations for individuals, where the individual utility maximisation is acting as the dynamic element in the institutional set-up. Although differing in detail, the different strains of rational choice models are characterised by a common set of assumptions, regarding the rational individual behaviour, and a common set of problems, relating to the classic challenge of how to make decisions relating to social welfare without having that decision imposed by a (central) authority. Most important, however, is the common assumption that institutions are formed from a "tabula rasa". Past history is of little concern and new sets of incentives can produce the desired behaviour immediately, provided the right mix of inducements and constraints. The immediate focus will nevertheless vary. A political scientist like Ostrøm (1990) has been most concerned with extracting the necessary minimal requirements relating to the successful management of common property resources (CPRs). She is concerned with institutions as means of "prescribing, proscribing and permitting a certain type of behaviour". Economic historians

like North (1990) and economists, like Eggertson (1996), have been more concerned with the particular institution of the market, and the rules prescribing property rights regimes. All approaches within the rational choice paradigm have problems of explaining how the ultimate preference of maximising individual gain is made. While institutions can form most other preferences, the most important, driving preference is somehow externally driven and (evidently) constant over time.

Against this instrumental perception of institutions we can supply a more sociological concept, where management institutions are viewed as being embedded in a larger social structure. The key concept, "embedded" originated from Polanyi's (1944) famous study where he accounted for the social and cultural constraints on economic action in pre-market societies. Thirty years later Granovetter (1985) resurrected the term in order to explain how rules, procedures and normative standards of conduct in various institutional realms such as economic, cultural and social life influence and shape each other (Apostle et al. 1998:236). While Polanyi was concerned with the disembedding features of modern market economies. Granovetter's intention was to show that these economies are indeed influenced by personal relations transmitted through networks. But as pointed out by Barber (1995), who traces the story of the embedded concept, Granovetter does not deal with the larger social systems in which all economies are located. This deficiency is the explicit starting point of Hollingsworth and Boyer (1997:3), who try to develop the argument that markets and other co-ordinating mechanisms are shaped by and are shapers of social systems of production. There is, in other words, an interconnectedness between social and economic institutions, working both ways. Dominant social values, rules and procedures may limit or obstruct what is planned in the economic sector, and vice versa, economic processes may, over time, influence social and economic beliefs. The important point is that institutional change is partly outside the realm of direct human intervention. Therefore, institutional reforms may give some quite unexpected results or even no results in the short run, if they are totally out of context with what is considered socially and culturally acceptable. Whatever the case, institutional reform will most often require considerable time to show results, due to the inherent sluggishness in the system. (The more detailed logic, based on a nested systems perspective is spelt out in Holm et al. (1998)).

Consequently, according to the embedded perspective, the introduction of a new management regime, like introducing ITQs, is more than designing the system, getting the incentives right and persuade the decision makers. If institutions matter, politics matters even more! And politics is not an exogenous variable in fisheries management that can easily be eliminated. Politics is, whether we like it or not, the very essence of resource management, that is, allocating scarce resources (Easton, 1965). But before we start unfolding the story, we have to give a short presentation of the Norwegian fishing industry in order to give the historical and contemporary setting.

# 3. THE NORWEGIAN FISHING INDUSTRY

Norway is one of the larger fishing nations in the world, with catch volumes around 2,5 mill. tons per year, which ranks Norway as number ten in the world according to FAO statistics. Norway's position is mainly due to the fact that the areas along the coast belong to a central up-welling system (the Gulf Stream) and further that these areas have been exclusively reserved for Norwegian fishermen. Most of the fish is therefore caught within the Norwegian Exclusive Economic Zone (EEZ), an area encompassing more than 1,2 mill km². In addition Norway is responsible for two fishing zones of approximately 1 mill km² around the islands of Spitzbergen and Jan Mayen. Nevertheless, 80 % of the total catches are based on shared stocks, where the management responsibility is shared with Russia, the EU, Iceland, the Faro Islands and Greenland.

The fishing industry plays a relatively limited role in the overall Norwegian economy, being responsible for approximately 1,5 % of the GNP and near 2 % of the total employment. However, as an export industry fish and fish products figure as the second most important sector, next to oil (and before gas), being responsible for 8 per cent of total Norwegian export. In 2000 the total export value was close to NOK 30 bill. (approx. US\$ 4 bill.). This figure includes the sales of aquaculture salmon (approx. NOK 10 bill.), which has turned out to be an extremely important part of the Norwegian fishing industry, both in terms of production, employment and export. The first hand value (ex vessel) of the Norwegian catch is considered to be NOK 10 bill., being distributed among 18 967 fishers, of which 5267 are part-timers and 13 700 have fishing as their main or sole occupation (Director of Fisheries 2002). Regionally the fishing industry plays a much more significant role, especially on the

West Coast and in Northern Norway, where entire municipalities are based on fishing, processing, aquaculture and related activities.

The Norwegian fishing fleet comprises about 12 000 vessels of which 8 500 are defined as active. Of these around 95 % are coastal vessels below 30 meters (Directorate of Fisheries, 1998). While coastal vessels vary in size from 3 metre skiffs to 30 metres shelter-deckers, the vessels in the 8-24,9 metres range account for 80 per cent of the fleet's total landings. Seasonality is a characteristic feature of the coastal fishery since it exploits the different fish stocks as feeding and spawning migrations bring them close to shore. As the mainstay of the traditional coastal economy, the fish resources have been regarded as common property of the coastal people. In practical terms, this meant open access to the fisheries, but not for anyone. When capital intensive technologies - seine and trawl - were introduced in the groundfish fisheries towards the end of the last and the beginning of this century, the fishers resisted fiercely. They saw this as an attempt from merchants and industrial capitalist to take control over the fisheries. The fishers regarded them as "outsiders" with no legitimate right to harvest the resource. The Norwegian authorities have reluctantly accepted this viewpoint. Hence, seine was banned from groundfish fisheries with the adoption of the 1897 Lofoten Act (Jentoft and Kristiansen 1989), while trawlers originally were banned with the adoption of the 1936 Trawler Act, except for the few already established (Johansen 1972). Free access to the fishery only applied to people adhering to traditional fishing practices. This restriction was reconfirmed by the 1947 Ownership Act, reserving the right to own fishing vessels to active fishers (Mikalsen 1977).

During the post-war period the restrictions against capital intensive technologies, and hence against "outsiders", have gradually been weakened. As part of the attempt to rationalise the fisheries, both the Trawler and the Ownership Acts were made less restrictive (Sagdahl 1973, Mikalsen 1977). This meant the addition of an offshore trawler fleet in Norwegian fisheries, partly controlled by the processing industry. Instead of ending the traditional fishery, as the fishers had feared, the result has been a dual fleet structure, where the coastal and offshore sectors exist side by side. In addition to the differences in technology, operational patterns and ownership structure, the two fleet segments were subject to very different regulatory regimes. While the coastal fishery remained under an open access fishery, the trawler fleet was subject to strict access controls right from the start. Not before the cod crisis of 1989/90 should the coastal fisheries be effectively closed, even if the principle was introduced by the mid 1980s.

# 4. THE INTRODUCTION OF LIMITED ENTRY

By the end of the 1960s Norwegian fishers experienced a massive crash in the herring fisheries. The resources were not inexhaustible and the economic consequences of overcapacity also became evident, especially through the system whereby the fishers could claim subsidies to compensate for lack of profitability. The fleet had to be reduced, just like the trawler fleet and the fleet fishing for shrimp. At the time "limited entry" was the internationally accepted remedy and through a new law regulating participation in the fisheries in 1972 (Deltakerloven) the principle was introduced in the Norwegian fisheries. There were four different goals attached to the implementation of the law: First, fishing capacity had to be adjusted to the carrying capacity of the resources. Second, profitability had to be obtained by the fleet as well as the single operator. Third, the license regime should contribute to a "reasonable (geographical) distribution of the fleet" and last, the exclusive access rights of bona fide fishers should be protected. The geographical distribution clearly indicated that fisheries policy was part of the regional policy, which in the Norwegian setting meant that the fisheries should contribute to the maintenance of the settlement pattern. In our context the important lesson is that the measure was too little, too late, that is, all existing vessels were guaranteed rights in that particular fishery while new entrants were denied. According to Hoel et al. (1991) the system did not achieve its main goals, even though special regulations were attached to the transfer of vessels with rights. What was achieved was the establishment of a "grey market" for fishing rights, whereby rights acquired for free soon achieved considerable value, especially when the TAC was divided up in separate vessel quotas, as in the purse seine fisheries. Although the Ministry insisted on approving all transfers, smart fishers (with good assistance from even smarter lawyers) soon found ways to circumvent many of the limitations. And within ten years most of the purse seiners were concentrated in a few West Coast municipalities (Hersoug 1984). The only exception to this pattern was the fresh fish trawlers, being strictly attached to the fillet producing factories in the north. However, limited access was introduced and accepted, not least because the system had been recommended by the organised fishers, represented by the NFA.

#### 5. THE (UNSUCCESSFUL) INTRODUCTION OF AN ITQ-SYSTEM

In 1988/89 it was evident that a new cod crisis was looming, just like the situation in New Zealand in the early 1980s. Following record catches in 1986-87, the researchers of the Institute of Marine Research openly admitted that the Total Allowable Catches (TACs) had been fixed too high and that the stocks were rapidly declining. Consequently, the issue of over-capacity was put on the agenda. The issue of ITQs was introduced through the report of a working group on the structure of the harvesting sector. The group comprised representatives from the Ministry of Fisheries, the Directorate of Fisheries and the Norwegian Fishermen's Association (NFA). The original idea was to introduce enterprise allocations ("rederikvoter") in the offshore fleet, thereby making it possible for companies with two or more vessels to rationalise the actual catching and by next round, making it possible for two or more companies to co-operate in reducing effort. This was by most fishermen and politicians alike, considered being more or less similar to ITOs. Although the NFA originally had endorsed the proposal, it was soon in the middle of a heated debate, with almost unified opposition from the coastal fishermen. On the outset everybody agreed that over-capacity was the main problem. According to the committee the costs of restructuring had to be borne by the fishermen themselves, as state subsidies had been dramatically reduced as part of the European Economic Space Agreement. This did not go well with the perception of fisheries policy as regional policy, contributing to the settlement pattern. Politically the new high flyer was shot down even before take-off.

Faced with overwhelming opposition the minister backtracked and decided to initiate a white paper to the Parliament, but now dealing with a much larger range of management issues. Four officials from the Ministry of Fisheries were assigned to draft the first discussion paper, which (for the first time) was discussed not only with the biologists of Institute of Marine Research (the official adviser to the government) but with economists and social scientists from the Norwegian universities as well. Drawing heavily on the existing ITQ-schemes in Australia, New Zealand, Iceland and Canada the group presented an overview of different forms of ITQs, ending up by recommending an ITQ-system with strong geographical limitations on transferability (Ministry of Fisheries 1991). The report discussed various forms of "transferability", including:

- the traditional trading of quotas,
- transfer of vessels with quotas,
- enterprise allocations to be "traded" within the company,
- the renting of quotas on an annual basis and
- co-operative fishing where several owners may decide to use one boat to catch several quotas.

The ministry's preferred version (pertaining to vessels larger than 8 meters) was based on TACs allocated to different groups (vessels and regions) based on historical catch. Individual quotas given as shares, should be allocated for a limited period (5 years) and be subject to an annual resource fee, paid to the government. Quotas should be traded freely within groups and regions, while transfers across vessel groups and regions would require the permission of the ministry.

By taking the demand for larger flexibility and the need for regional stability into consideration, the ministry thought the proposal should meet with acceptance, not only among fishermen but among local and regional politicians as well. Exactly the opposite happened. "The overwhelming majority of those consulted were strongly against ITQs, even in the modified version suggested in the draft" (Apostle et al. 1998: 198). Looming large in the background was the fear that Norwegian harvesting rights would be bought up by European companies (Government of Norway 1991:126-7). Not only was the ITQ question connected to the coming debate of Norwegian accession to the EU, it was also immediately made an issue in the local elections of 1991, where especially representatives of the north opposed "any privatisation of the commons". The issue threatened the political harmony of the Labour Party (now in government) and a task force within the party found that the question of ITQs was not on the political agenda, a position reinforced by the prime minister, evidently for expedient political reasons (Moldenæs 1993). When the revised political version of the white paper appeared in Parliament, the question of transferability was considerably watered down. In the report from the standing committee on fisheries the majority rejected outright an ITQ option, while a minority would continue the work to introduce a program for ITQs, views that were later reflected in the general debate in Parliament.

ITQs was, according to the winning coalition "a dead horse", thereby signifying a remarkable defeat for the former minister, the top bureaucrats in the ministry and the generally powerful employers organisation of Norway (NHO). The ministry had evidently miscalculated not only the general political

attitude, but misread the fishermen as well. Apostle et al. (1998) discuss the possible explanations, pointing to the short duration of the crisis (on recovery in 1992/93 overcapacity was no longer the pressing issue), the extraordinary process (where the industry organisations were not represented in the committee drafting the paper) and the lack of power on behalf of the government to make tough decisions in times of crisis. None of these explanations are satisfactory, seen in isolation. We shall return to an alternative interpretation later. As pointed out by Hersoug et al. (2000) the horse was definitely not dead - it just took another (and considerably longer) route! But first we have to present the establishment of an alternative to the ITQ-system, the Individual Vessel Quota (IVQ) system.

# 6. THE END OF OPEN ACCESS IN THE COASTAL (COD) FISHERIES

The open-access regime in the Norwegian coastal cod fishery came to an end with the collapse of the Northeast Arctic cod stock in the late 1980s. Due to a sudden and unexpected decline in the size of the cod stock, the overall TAC was set to 340 000 tons in 1989, down from 630 000 tons the previous year. The coastal fleet's quota was reduced from 200 000 tons in 1988 to 116 000 tons in 1989. As it turned out, the combination of a small total quota and a competitive fishery produced unhappy results in the 1989 fishery. The fishery was closed after only three and a half months of fishing and the slogan was: "never again!" On the basis of this experience, an individual vessel quota system was constructed during the fall of 1989 and implemented during the 1990 season. The political process by which the IVQ system was put together has been detailed elsewhere (Holm and Raanes 1996) and will not be described here. Suffice it to note that the user groups, and particularly the fishers through the Norwegian Fishermen's Association, had a relatively strong position in this process. The key policy arena in the case of the negotiation of the IVQ regime was the Regulatory Council, established in 1983 as the meeting place between industry representatives and the fisheries authorities in resource management issues (Hoel et al. 1996). While the council formally only had an advisory role vis-a-vis the fisheries minister, the council's decisions would usually, and particularly if they were unanimous, be very influential. In this case a government decision was made during the fall of 1989, based on the recommendation of the Regulatory Council.

The IVQ system was a two-tired system. On the one hand, the most active vessels, as measured by the quantity of cod landed in the 1987-89 period, were put under a vessel quota regime. These quotas were exclusive, so that the vessel owner (skipper) had full discretion to decide when and where to take it. On the other hand, the less active vessels were allowed to fish competitively under a group quota. There were no restrictions as to participation in this fishery; any registered fisher was free to join. However, the allocation to this group only amounted to about 10 percent of the total quota in the coastal cod fishery, and each vessel was subject to a small maximum quota (originally 2,5-3,5 tons).

In the 1990 season, the Individual Quota group (Group I - full rights) counted 3 534 vessels, while the Maximum Quota group (Group II - restricted rights) group counted 4 172 vessels. Since then, the number of vessels in both groups have declined considerably, to 2 766 and 3 536 in 1999 for groups I and II respectively. Underneath this relative stability, substantial interchanges between the two groups have occurred. While transfers of vessel quotas by themselves are not allowed, such transfers happen when vessels change hands. A fisher can hence join Group I by buying a vessel with a right to fish in Group I. In addition, a certain movement into and out of this group is controlled by the fisheries authorities under the label of "recruitment". From 1994, continued participation in Group I was made subject to an activity requirement: To keep its quota, a vessel had to have fished at least forty percent of its allocation the previous year, later to be adjusted to ten per cent. An important reason why the IVQ regime could be adopted was that it was a temporary response to the resource crisis, and would be abandoned once the situation returned to normal. While the fisheries authorities as well as the Fishermen's Association hence regarded the IVQ system as transitional, they were not in complete agreement as to which part of the system that would have to change. The Fishermen's Association wanted to abandon access restrictions as well as individual quota rights, and return to an open-access regime of the pre-1990 type (NFA 1989:7). The fisheries authorities, in contrast, wanted to get rid of the individual quota rights, but keep the strict entry controls (Director of Fisheries 1993a:II, 8, Ministry of Fisheries 1992:136). In the debate over the quota system, this difference in opinions was not brought out in the open, giving an appearance of complete agreement that the IVO system was a temporary crisis measure.

In spite of this agreement, the IVQ system became permanent. While the crisis passed, the established regime remained. During the 1980s, the annual landings from the coastal fleet averaged 180 000 tons. Assuming that this represents a "normal" situation in the fishery, the crisis was over from 1993, which also was the perception within the industry. Despite this, however, the Ministry of Fisheries did not

want to abandon the vessel quota system. With reference to over-capacity in the coastal fleet, it was argued that the quota was still not large enough to allow all vessels a normal level of operation (Ministry of Fisheries 1992). In spite of its earlier position, the Fishermen's Association supported this view (NFA 1992b), and the vessel quota system remained in place. The IVQ system remained also for the 1994. This year saw an innovation, however, in that 33 % of the quota within Group I (full rights) was allocated on a competitive basis. Thus, the vessels got a maximum vessel quota, of which only two thirds were guaranteed. For 1995 and the consecutive years this arrangement was extended and the whole quota was allocated on a competitive basis. The introduction of more competition within Group I did not mean a return to open access. The vessels that had been excluded from this group in 1990 were not allowed to re-enter, as the Fishermen's Association originally had wanted. And as pointed out by Holm et al. (1996) the main reason is that the lucky owners of rights in Group I discovered the benefits of being inside, that is, of fishing when it suited them and not least, of selling the vessels with the additional quota value. Through this institutional change (the creation of the IVQ regime) a new social carrier of ITQ-rights was created and in the years to come this group should be the main frontrunner for further limited access.

## 7. THE "TRAWLER LADDER" AND THE USE OF LONG-TERM ALLOCATION KEYS

While TACs in the important cod fisheries were introduced already before the establishment of the Norwegian EEZ, there was no effective allocation on different fleet groups. The trawlers received individual quotas from 1976 onwards, but the coastal fleet could fish with only minor restrictions until 1986, due to a loophole in the Norwegian Russian Fisheries Agreement. However, following the 1989 crash a fixed allocation key was required. Overcapacity was defined as the main problem but representatives of the offshore fleet was extremely reluctant to start restructuring as long as there was virtually open access in the coastal fleet, fearing that any efficiency gains would immediately be consumed by more entrants in the coastal fleet. Hence, a fixed allocation key was needed. This was also acknowledged by the NFA and after intense debate the so-called "trawler ladder", an allocation key indicating the sharing formula between the offshore fleet and the coastal fleet was finally decided in 1989. Based on the five-year allocation key, the Ministry of Fisheries could start the difficult task of scaling down the trawling fleet. A "unit-quota"-system was introduced, whereby companies having two or more trawlers were allowed to merge two quotas after withdrawing one vessel permanently from Norwegian fisheries. The dimension of the task can be seen when we consider that that the technical catching capacity of the trawling fleet was estimated to 360 000 tons per year (according to the Structural Committee), while the quota for 1990 was fixed to 30 000 tons!

Overcapacity was not a problem only in the demersal fisheries. Also in the pelagic fleet there were tensions as technical improvements increased efficiency, while quotas remained the same or in some instances were reduced. According to a central committee comprising a number of leading pelagic fishers the future course was clear: "Regarding the allocation we are facing a classic conflict which it is impossible to "research away". The different groups must therefore be given stable and long-term quota allocations, so that the actors themselves can plan their activities and adjust". Hence, in 1994 a new long-term allocation key was proposed, this time comprising of more species (including herring, mackerel, capelin as well as saithe and haddock). In NFA this caused a dramatic conflict, especially over the allocation of cod. On the one side we found the vessel owners of offshore vessels, demanding a larger percentage, on the other the coastal fishers from the north, demanding what they considered the right historical share. Interestingly enough, a number of criteria had been suggested in the report leading up the decision, but in the end it was historical catch within vessel groups (not the individual vessels) that was used, thus reflecting size and previous investments. However, the compromise was fragile and was only carried through by a slight minority, after the various fractions for months had threatened with leaving the organisation (NFA). That left the Minister of Fisheries with little political discretion in terms of altering the allocation keys, for example as a result of changing TACs or dramatically changing market conditions. When one minister tried to move less than 2% from one group to another, this created nearly a fisheries crisis and subsequent ministers have stuck to the allocation key to the minute detail.

After seven years of turbulence the keys were up for new discussions by the end of 2001. This time the threats of breaking up and leaving the organisation was even more pronounced, centring on virtually minimal changes to the previous allocation key. The case had been thoroughly prepared through a large committee, consisting of fishers from most fleet segments. The committee managed to obtain a compromise and after days of haggling, a similar compromise was obtained in NFA, now binding the allocation for the next six years. In order to make the allocations work it would be necessary to close a

number of fisheries, that is, to limit the participation according to certain criteria. In the fisheries for saithe north of 62°N, saithe south of 62°N, haddock north of 62°N, Atlanto Scandic herring, mackerel and herring south of 62°N, participation would have to be closed. As with all compromises there are different ways of interpreting them. Representatives of the offshore fleet went home and although they had to give in on a few tons, they had secured a pledge from the union that reductions would have to take place, not only in the offshore fleet but in the coastal fleet as well. The principle of closing the coastal fisheries had at last been accepted, not posing a permanent threat against any reductions in the offshore fleet. The coastal fishers could on their side claim that some concessions had been made, making their share slightly bigger, while the most important gain was that the so-called "Finnmark model" was accepted. That is a principle whereby the coastal fleet is divided in four length-groups and each group is allocated a quota according to its historical share. Any capacity reduction taking place can only be maintained within the group, thus blocking any large-scale transfer from the smallest groups to the largest. All fishers could claim it was a victory to keep the organisation together, NFA now finally being able to work with other issues of importance for the fishers after ten years of intense quota allocation battles.

## 8. THE CLOSING OF THE LAST COMMONS?

During the fall of 2002 the Ministry of Fisheries has introduced three important changes in the Norwegian access regime, at the moment hotly debated with the prospect of being implemented during 2003/2004. The first is the closing of remaining open access fisheries. In the north the saithe and haddock fisheries have remained open during the 1990s, even if the most important cod fishery was closed in 1990. According to the Ministry no further restructuring in the coastal fleet can take place before there is a de facto closed access, a position strongly supported by the Norwegian Vessel Owners Association (Fiskebåtredernes Forbund). The idea is to introduce a dual structure, just like in the cod fisheries, where a privileged group of approximately 2000 vessels will receive individual vessel quotas according to the length of the vessel, with a large group (approximately 5000 vessels) being left with an Olympic fishery on the small remaining group quotas. The interesting paradox is that this group has never been threatening the resources, being responsible for less than 10% of the total catches. But again, the main argument is the *potential capacity* that can be activated, if conditions are favourable, that is, with easy access to the fish and high prices. At present it seems likely the closure is imminent and that the main debate is over technicalities such as the qualifying years and the minimum requirements for entering into the privileged group. And, as usual, the protesting groups are relatively weak, being represented by the Norwegian Coastal Fishermen's Union (Norges Kystfiskarlag) and various local politicians. However, their concerns are very real, as these fisheries have constituted the backbone of many small-scale and part-time fishers in marginal regions. With these fisheries closed, more of these fishers will be marginalized, with repercussions in terms of employment and settlement. Recruitment directly into the coastal fleet will also be affected as the entry ticket will be considerably more expensive. In order to make a living as a full-time fisher you will have to buy a boat with access rights (in Group I), implying that you will have to pay a stiff price for the access right itself, officially not on sale.

The second proposal concerns the actual restructuring of the coastal fleet, for years considered having substantial over-capacity. (The capacity concept is notoriously difficult, knowing that a number of small-scale fishers have a technical capacity which they choose not to apply, due to a variety of reasons. For the Ministry the argument is simpler, looking at the annual economic results, and finding that in average the coastal fleet is earning way below the average in the offshore fleet). With economic problems looming large in the horizon for the larger coastal vessels, some measures of increased efficiency have to be introduced. After long a careful consultation with the Norwegian Fishermen's Association the Ministry has suggested two main avenues: either co-operation through the exchange of quotas between various vessels or a more permanent restructuring, through the merging of fishing rights. The wording is interesting, as when the Ministry goes to lengths in assuring that this is not equivalent of ITQs, but "exchange" of fishing rights under the full control of the Ministry. True enough, the transfers are closely circumscribed, having to be approved by the Ministry, with separate markets in each county and limited to vessel owners in the same length group. Exchanging quotas can only take place three years in a row (within 5 years) and each exchange has to cover the entire quota within that particular fishery. The permanent merging of quotas will only take place in the larger vessel categories and not comprise the smaller coastal vessels (less than 15 meters). Just like in the early 1990s this proposal has raised the ire of many small-scale fishers and local politicians while the NFA has been in favour, together with the banks and the owners of offshore vessels. In reality the proposal is

only a continuation of the policy started in 1990, but now with more flexibility in order to produce less effort and better returns. Reducing active effort is probably the least problem as TACs are low and technical capacity large and increasing, while improving profitability is more difficult, knowing that the restructured fleet will have to pay considerable sums for their quota acquisitions. Even more problematic is the issue of legitimacy, as this proposal makes public property an open commodity, even if the Ministry is guiding the transactions. Hence, from various corners the issue of a resource fee has been raised, suggesting that the few privileged fishers getting access will have to pay something in return to society.

The third proposal concerns a decommissioning scheme for the coastal fleet, where the Ministry proposes a sharing formula whereby the industry will have to pay 50% through a separate fee, charged on all landings. That is contrary to tradition, where the state has paid all decommissioning schemes up to now and the accusation on behalf of the small-scale fleet is that they will have to pay "for their own funeral". The idea is of course to remove overcapacity and hence make the fleet more economic efficient, but as will be demonstrated in the last section, there are a few hitches to the logic. There may be fewer boats but the capital and the capacity may not be reduced to the same degree. Taken together, these three proposals go a long way in the direction of closing the coastal commons, having already implied that the offshore part was effectively closed from the 1970s onwards. The wording (exchange, not transfers), the circumscribing conditions (government approval, limited markets, limited duration etc) and the aggregation limits indicate what is politically possible in the Norwegian setting at the moment. Or to put it more bluntly: the Norwegian capture sector has for many years been on a path dependent course towards an ITQ-system. However, due to political resistance within its own ranks as well as among other groups, NFA has manoeuvred through the small steps, gradually building up a support base for a more flexible system, with less obligations to employment and settlement, traditional cornerstones on the Norwegian fisheries policy. So what have been the results?

# 9. CAPACITY, ECONOMIC EFFICIENCY AND SETTLEMENT CONSEQUENCES

There is little doubt about the fact that the Norwegian fishing fleet has had a technical overcapacity since 1977, when the 200 miles EEZ was introduced. This is partly a result of the subsidy scheme that was operational since WW II and up to the early 1990s, whereby prices on catch was heavily subsidised in years where world market price could not guarantee Norwegian fishers a decent income. Another contributing factor is that the fisheries policy for years was an important part of the regional policy, whereby employment in the fisheries was deliberately used to strengthen the settlement in peripheral regions. Or to put it more bluntly: The resource rent was used to pay for overcapacity. In the coastal fisheries the issue of overcapacity is slightly more complex, as technical capacity is seldom used, due to a variety of (cultural) reasons. A number of operators are satisfied to earn "enough", which is far from full capacity utilisation. In addition, there are large annual fluctuations in availability of stocks, which means that "overcapacity" one year could imply too little capacity another. In spite of this it has been official policy to reduce capacity over the last three decades, both in the offshore fleet as well as in the coastal fleet. In the offshore fleet massive investments in decommissioning schemes reduced the number of vessels, but not the effective catch capacity, which has remained more or less stable. In the coastal fleet the results are even more disturbing. According to calculations made by Standal and Aarset (2002) the number of coastal vessels within the guaranteed quota system (Group I) was reduced by 24% in the period 1990-2000. At the same time the calculated catching capacity increased by 50% and definitely most in the largest vessel groups (20 m and larger). This was largely the result of a fleet renewal programme, largely initiated y the government and heavily subsidised by the State Investment Bank (SND). And although the it was clearly stated that the necessary fleet renewal should not lead to an increase in catch capacity "the paradox here is that the expansion of the coastal fleet capacity was "paid for" by quota shares taken from the fishermen who did not contribute to the expansion and the general increase in capacity" (Ibid).

Judging from the annual investigations of profitability in the fishing sector there has not been a general improvement in profitability over the last ten years. While the offshore fleet and the purse seiners in particular have had impressive economic results in the late 1990s, the various groups in the coastal fleet display a highly diversified pattern, where the top earners one year constituted the losers the next. One reason why the economic result has not improved much is the simple fact that the larger, newer coastal vessels have not been allowed to fish according to their capacity (steadily reduced quotas) while all groups have had to face the expenses encountered by buying rights and quotas. When we know that at least 60% of the quotas allocated in 1990 have changed hands by 2002, it is easy to see that the massive investments

in rights and quotas have to be paid for, thus reducing profitability for a number of years to come. This should not be confused with the extreme windfall gains made by the operators who got their rights for free in 1990 and have left the fisheries lately. Many of early leavers invested in aquaculture farming (of salmon) while later "quota barons" have entered into other sectors, including property in Spain. If this is indicative of the larger trend, the effect of effort reduction will largely be to channel capital away from the coastal communities, a rather unintended consequence.

Finally, there has been a steady reduction in the number of fishers over the last decade. There is no dramatic change as the number of fishers has been steadily reduced over the last 50 years. What is new is that fishing is not an employer of last resort, that is, open for whoever might be interested in creating a living in a marginalized part of the country. With a costly entry ticket, recruitment is reduced and areas with few or no other means of employment are further marginalized. According to Hersoug (2001) the population prospects of the fisheries municipalities are rather bleak and the rapidly increasing aquaculture sector has by no means been able to offset the reduction in the catching and processing sectors.

#### 10. NORWAY - THE HESITANT REFORMER

We started out by asking why Norway could not simply copy New Zealand and introduce a fully-fledged ITQ-system without any more hesitation. As shown in Hersoug (2002) there were a number of rather favourable circumstances surrounding the introduction of the New Zealand QMS in 1986, conditions that are not present in Norway. Any change in the Norwegian management system will have to take due consideration of the fact that open access is part of a long and distinguished tradition. The political sentiment is still strongly in favour of maintaining a relatively large fishing sector, contributing to employment and settlement in remote areas with few or no other alternative employment possibilities. In addition it can be argued that the small-scale coastal fleet is flexible, economically efficient and bio-economically sound, concentrating on the larger and more valuable fish. So why reduce it?

In spite of this, the development in Norwegian fisheries has over the last 30 years moved indiscriminately in the direction of closed access and larger vessels. First the offshore fleet got limited entry, followed by individual quotas and finally "unit quotas" that could be bought and sold, although based on the approval of the Ministry. Still, quotas are officially not for sale, while the reality has for more than 20 years been a considerable grey market where rights are exchanged for large sums of money, that is, rights given for free in the early 1970s. What is new is that the coastal fisheries are following suit, a development taking place over the last twelve years and catching up speed as one fishery after another is being closed and quotas allocated on long-term basis. This is a development that has been in accordance with recommendations from the NFA, while heavily resisted by the other organisation, organising mainly small-scale fishers. From originally closing the cod fisheries as a temporary crisis measure, the development has moved with increasing speed, now encompassing more than 95% of Norwegian catches and leaving the less privileged fishers with only marginal resources. The key to the process has been to create an administrative and social carrier for this scheme. While the administration has been in favour of closing the commons since the late 1980s, the fishers have been more ambivalent and the turn-around did not occur before a sufficient number realised the economic benefits following such a system. However, this is also the main "Achilles heel" of the present set-up, lacking severely in political legitimacy as the lucky privileged ones do not pay any resource fee, resource rental or cost recovery back to the state or to the public. The reason for this state of affairs is probably that fisheries regulations have become so complicated that only a few parliamentarians understand the underlying logic. When the new management system in addition is presented as something entirely different from an ITQ-system, no wonder that many ordinary citizens as well as politicians loose track of what is really going on.

According to Standal and Aarset (2001) the present regulatory regime has exhausted its possibilities. Massive over-regulations are no more possible and with reduced quotas the new large coastal vessels need larger quotas in order to survive. At the same time the owners of the offshore vessels have been extremely reluctant of restructuring before the coastal fleet is effectively closed. New proposals for further access limitations and a joint decommissioning scheme have raised considerable debate and resistance, and the future course is by no means secure. What are the options? The path dependency we have indicated already back in 1996 (Holm et al. 1996) should indicate that Norway ends up with an ITQ-system, although the transferability of rights and quotas will for years be severely circumscribed

and all transactions guarded by the Ministry. Special safeguards will be constructed in order to maintain some type of regional balance and the maintenance of the coastal fleet, although on a dramatically reduced level compared to the present size. The alternative scenario implies that rights belong to communities and areas, and that proximity to the fish resources guarantees a certain right, much the same way the coastal states argued in the 1970s, in the process leading up to the LOS Convention. Such schemes are familiar in Arctic Alaska in the form of community quotas. While experiences are mixed, there is no doubt that the communities next door to the resource are in a better position if being granted a certain percentage of the resources to be disposed at their own discretion (Townsend 1997). Similar schemes are now being implemented on the Canadian East Coast for the coastal fleet, trying to tie the rights of fishing to certain communities or regions, not accepting that vessel owners are free to sell to who-ever they please. In Norway various schemes have been discussed over the years and not surprisingly, met with disapproval by most fishers, that is, vessel owners. (Crewmembers may view the issue entirely different, having an interest in keeping the catching rights in the community even if the boat is sold). Chances for such a scenario are presently slim, even if many politicians are in favour, because second-hand owners and banks having cashed out to buy vessels with rights are extremely reluctant to change the rules of the game. An alternative could therefore be that communities, municipalities or even counties were allowed to buy rights in order to supply their own fleets. That would with the existing legislation require a change in the law of ownership, requiring that only fishers can own (the majority) in coastal fishing vessels.

A third possibility is that the introduction of ITQ-based solutions again meets with such heavy political resistance that the fisheries authorities would have to live with two different regimes. One based on limited transferability as in the offshore and larger coastal fleets, while the other will contain the small-scale fleet still being relatively open, for example administrated more through technical management measures, like minimum size, gear regulations, closed areas and closed seasons combined with maximum quotas. This has been suggested by the organisation of the small-scale fishers for many years, but so far with limited support. However, turning the coastal fisheries into a more ITQ-based regime *could* mobilise a large number of stakeholders, in addition to the discontented fishers being excluded through the 1990 reform.

Neither of three scenarios solves the most pressing problem of legitimacy at the moment. Just like in many other nations, it is politically acknowledged that Norwegian fishing resources are national public property. In spite of this, Norwegians can everyday read new accounts of fishers, getting their licenses or access rights for free in the early 1970s or in the 1990s now selling them and cashing in a handsome profit, depending on the size of the vessel and hence the quota. Without any resource tax, especially in the very profitable offshore fisheries, there will hardly be peace in the Norwegian fisheries. For while Norway has served as a relatively successful case of co-management for years, this harmony is now being questioned by many stakeholder groups. Just like in New Zealand, there are many organised interests claiming that the fisheries are too important to be left to the fishers and the fisheries authorities.

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