



SOLVING THE “COMMONS TRAGEDIES” WITH RIGHTS BASED MANAGEMENT. THE REFORM OF THE COMMON FISHERIES POLICY

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ABSTRACT

Recently, the Pew Environment Group released a study that finds that E. U. fisheries have failed to reduce fleet capacity thus exerting fishing pressure on stocks at two time sustainable levels. Overcapacity and overcapitalisation was identified as the principal failure of the Common Fisheries Policy. The study highlights that member-states failed to take *environmental* and *social* concerns into consideration when allocating public funding.

This conclusion may be important in the CFP reform (2012) and put the discussion about the tools to get sustainable management.

The idea of creating markets for fishing rights as a means of internalising the externalities derived from the common property nature of fisheries have received considerable attention by the founding fathers of Law and Economics and Fisheries Economics. The solution is to create a market of individual transferable quotas (ITQs) and confide in the self-regulation of such a system to conduct fisheries to economic efficiency and promote inter-temporal sustainable use.

Rights Based Management schemes have already been experimented in specific fisheries and localizations. These experiences have teaching results about good practices of sustainable management and the limitations of these tools. The conclusions are fundamental to explore the feasibility of these tools as instruments of conservation in the CFP. The purpose of this communication is to enter this debate.

Key Words: Fisheries, Individual Transferable Quotas Rights Based Management.

INTRODUCTION

Recently, the Pew Environment Group [1] released a study that finds that E. U. fisheries have failed to reduce fleet capacity thus exerting fishing pressure on stocks at two/three time sustainable levels. Overcapacity and overcapitalisation of the sector was identified as the principal failure of the Common Fisheries Policy (CFP).

This conclusion may be well important in the CFP reform (2012) and put again the discussion about the tools that can be used to get sustainable management and better cohesion. In a drafted “Green Paper” on the Reform, the European Commission is launching a wide, no-hold-barred consultation to the national administrations, stakeholders, researchers and other interested people. The objectives are to discuss the problems of this CFP and to explore the alternatives and the ways forward the new reform of fisheries policy.

The principle of “Relative Stability” shapes the Common Fisheries Policy. Nowadays, the conservation and management regime of EU fisheries is based upon TACs and quotas. But, in recent years, much attention has focused on ITQs (Individual Transferable Quotas) and other Rights Based Management regimes as an approach that will encourage more efficient use in fisheries by the allocation of private property rights. One important issue in the debate of CFP reform is, precisely, the introduction of ITQs and other similar RBM schemes. Our paper is a



contribution to this debate. The paper investigates the feasibility of introducing these new management regimes in the CFP.

1) THE CURRENT SITUATION OF EUROPEAN FISHERIES

Since the early 80s, when “Blue Europe” was settled, almost three decades have passed and the Common Fisheries Policy is confronted with major challenges[2,3]

Two fundamental causes explain the current state of European fisheries: *internal systemic weakness* of the conservation and management regime and *external challenges* [4,5].

CFP has not delivered sustainable exploitation of the resources. Conservation policy fails. Many stocks are outside safe biological limits. If current trends subsist, many stocks will collapse. They've been exploited too heavily, particularly the demersal stocks. At the same time, fishing capacity went on growing. Illegal fishing and the lack of effective enforcement are also notable elements of this picture.

This situation isn't specific to the Community. In fact, worldwide concern about over- fishing and overcapacity in the fisheries sector is well documented. The economic fragility of the sector, reflected in poor profitability and declining employment, is the result of a special conjunction of over-investment, rising costs and diminishing resource stocks.

At the political level, the difficulties, associated with the design and implementation of a regulatory system, are substantial: social constraints, diversity of socio-economic structural conditions of the fisheries sector in the member states, lack of involvement of the stakeholders in the management policy.

Another important factor of explanation of this situation is external challenge. The enlargement of European Union and the globalisation of the economy, the emergence of new players in world fisheries (especially coastal developing countries) and the increased focus on the environment are, perhaps, the most visible elements of this new context. In the international scene, the CFP is confronted with a “creeping jurisdiction” process - the slowly slide to the coastal countries' jurisdiction of many resources which were usually “common-property”.

This picture is not entirely negative. CFP had positive results. It has managed the resources and contained conflicts at sea, provided some degree of stocks stability and avoided the total collapse of stocks in areas with higher pressure and assured the availability of supplies to the Europeans. However, according to the Commission, these results have been achieved at a high price in terms of the long-term viability of the sector and with inefficiencies in the allocation of resources that, perhaps, could have been more profitable if they were addicted to other sectors in the global European economy. The critical problem is that the fleet profitability is jeopardised by the under-utilisation of investments. The excess capacity and a more-or-less constant value of landings to be shared between a large number of actors, reduces the capacity of each vessel to earn an adequate income. In this context, the subsidy policy, artificially reducing the costs and risks of investment, in an already over-capitalised industry, promoted over-supply of capital. Recently, the Pew Environment Group commissioned a study (Report of Poseidon Aquatic Management Ltd, 2010) assessing the economic, environmental and social impacts of the Financial Instrument for Fisheries Guidance, from 2000 to 2006. The members evaluated in this study accounted for more than 90% of the European fisheries subsidies (that amounted to 3,2 billion Euros). The key objective of the structural policy, that was to bring the fishing capacity of the European fleet into the line with the available biological resources, was not attended. Overcapacity and overcapitalization of the sector was identified as the principal failure of the CFP. This conclusion may be well important in the CFP reform and put again the discussion about the tools that can be used to get sustainable management [6].

2) THE PHILOSOPHY OF INTERVENTION OF “BLUE EUROPE”

The Management and Conservation Regime of fisheries in the European Union is, to a high degree, the result of an historic process with multiple compromises among national devices and political interests [7,8]. But, to look at the CFP as a simple, empirical result, of a day-to-day experience, is an error. Understanding the current difficulties is not possible without paying attention to the philosophy of intervention underlined in the options of 1983, when “Blue Europe”



was settled. The analysis of some basic documents and initial proposals of the Commission, in the 70s, allows identifying the philosophy and theoretical purposes that, implicitly or explicitly, were subjacent to the definition of the common fisheries management regime.

Since the beginning, two basic alternatives for the formulation of the European fisheries policy were to be considered:

- At one extreme, a liberal policy that should only establish competition rules in a common market;
- At the other, a policy of effective intervention, administered at a superior level, which could manage the resources in a perspective of equilibrium between the dynamic, biological conditions of fish growth and the economic conditions of resource use.

The Commission choice on the second was very clear: the necessity of a “comprehensive” fisheries policy was obvious. This choice rested upon the presupposition that free access (central to the Treaty of Rome) would lead to the overexploitation of the resources [9,10]. This conviction was explicitly made: “The straightforward implementation of the principle of equal access is bound to result in the rapid exhaustion of resources; the consequences of such a situation would be unacceptable” (SEC (1975) 4503 final, p. 9).

Of course, that was a problem for the Commission. Having the responsibility to assure the principles of the Treaty, it was out of discussion the opposition to the “equal access” principle. But, the fear of the “fishing race” and “overfishing” problems justified an intervention policy that could regulate the activity in the sector and obviate the perverse effects of open access.

For such a policy to be feasible, it needed a central authority. That involved a supranational management of resources because, allowing free arbitration of the sector development by national states, could lead to discriminatory action and poor enforcement and control. In this context, we can also understand the purpose of the so-called Common Structural Policy. This policy could help the poorest (and most dependent on fisheries) coastal areas in Europe by funding the modernization of the obsolete fleets of some member states. The “fisheries fund” (Financial Instrument for Fisheries Guidance) was, in this sense, one of the fundamental elements of a policy of structural reform but also of inclusion and cohesion in Europe, in what concerned the fisheries.

Settled the philosophy of intervention, the discussion then turned to the management tools.

The choice was on command and control instruments. The control of catches and selectivity in fisheries, with the establishment of TACs (Total Authorized Catches) and quotas, and technical measures of conservation (closed seasons, closed areas, minimum dimensions of fish caught and so on) were the preferred forms of regulation. The motives of this option were based on several reasons that included an implicit evaluation of the advantages of this kind of controls vis-à-vis other regulation alternatives, namely, those usually designed as indirect-economic tools, like taxes or ITQs, whose principal objective is efficiency in resource use.

At least, five fundamental reasons made the justification of that choice.

First, the Commission recognised that a common policy had costs and generated a lot of administrative problems. The advantages of direct controls were clear. The design and control of these tools were simpler. The necessary biological information existed. The Community could count on the experience of organisations like CIEM, NEAFC or NAFO. On the other hand, the implementation of the regulation was a task that the Commission could not develop without the collaboration of the national administration services. The diversity of those, in terms of structure and efficiency, implied the existence of a simple and clear regulation, of unquestionable scientific hardness, as a pre-condition for an effective implementation. Of course, a policy based on economic tools should bring problems almost insurmountable: exigency in information, high transaction costs in the preparation and negotiation of regulation, doubtful capacity of execution of the administrative staffs in several member states.

Second, the political constraint. Taxes and other economic tools, which are very exigent in political negotiations, were simply abandoned. Difficulties in tax harmonisation in EU are well known. Taxation is a sensible question, seen as a domain of national sovereignty. All concessions in this field are problematic. Direct controls are less exigent and facilitate the compromises.

Third, the problem of control and enforcement. The Commission has always given this question a central role in the Common Policy. Reasons are obvious. The Commission put the problem in



ethics terms: “It’s the only way to assure that the sacrifices of some member states in the recovery of the stocks are not in vain because of the irresponsible action of others”. Once again, direct controls had advantages. Enforcement was easier with simple regulation that agents could understand, less costly in administrative terms, and, if there existed effective means of inspection, evasion was minimized.

Fourth, the Commission’s preoccupation with uncertainty in stock evolution and environmental and economic changes, made the need for flexible tools. The possible necessity of urgent actuation in situations of environmental crisis, gave the direct-control tools a strong advantage, because they were easier to manage and modify.

Finally, the Commission emphasised the objective of minimising the social costs of the fisheries policy. In an original proposal of September 76, the Commission explicitly expressed the preoccupation with social inclusion in the fisheries sector and with the European cohesion. In the opinion of the commissioners, the management regime should assure “an equitable distribution of the limited resources between the member-states”, and “maintain, as far as it is possible, the level of employment and income in the coastal zones and in the areas mostly dependent on fisheries”. The European Parliament made pressure in this way, too, stating that the biological basis on which conservation and management regime should rest upon, could not be more than a starting point and, at least in the short run, the guarantees of employment and social inclusion were irreplaceable objectives. It is true that direct controls could not avoid the sacrifices of fishermen, unemployment and social tension. However, the reaction to other management economic tools that result in the abandonment of the less efficient producers, could be worst.

Facing these constraints, the answer was clear: A system of TACs and quotas was a simpler solution for the problems of equitable distribution of fishing opportunities, depending only on the quotas distribution formula between member-states. This formula of definition and allocation of use rights in European fisheries is now dependent upon several factors, like the dependency on fisheries of some coastal areas, level of employment and redistribution of quotas by means of minimising the effects of Extended Fisheries Jurisdiction on distant water fisheries. This is the so-called Principle of Relative Stability that shapes the Common Fisheries Policy. It can be seen as a means of establishing a balance between the promotion of economic efficiency, in the long run, and the necessary social-economic equilibrium in the coastal areas, in the short run.

3) RIGHTS BASED MANAGEMENT AND THE REFORM OF THE CFP

Besides the “balanced” fundamentals of CFP, this economic and juridical construction did not obviate the problems we highlighted in the first part of this paper. The choice of direct control tools, in the regime that was designed in 1983, means that those instruments were, implicitly, better evaluated. But there were costs. Direct controls do not eliminate “common property” externalities. These tools can help the recovery of stocks but they do not exclude competition and inter-temporal rationality is not imposed to the agents. So, inefficiency is maintained and overcapacity and overexploitation persists [11].

Now, what is interesting to analyse is the following:

Recognising the difficult situation of the fisheries sector and the management problem, the EU went on a great effort of reforming. Last Reform of 2002 pretended to mark a new beginning for the CFP. The main changes implicated:

- a long term approach in fisheries management;
- a simpler policy of fleet capacity, putting on the Member states the responsibility of reduction of the fishing effort;
- a better application and enforcement of common rules;
- the stakeholders’ involvement.

But problems subsisted. In the core, they had to do with the persistence of conflicts between objectives. One of the most relevant is the problem of conflictuality between decreasing fishing effort and the need of maintenance of jobs and of some socio-economic balance in the coastal areas. The maintenance of decent standards of living for fishermen would demand increases or, at least, the same level of captures. Such seems to be contradictory with the urgent need of stock recovery [12, 13].



THE QUOTA HOPPING CASE

The so-called “Quota Hopping” problem [14-16] is a very good example of our doubts and preoccupations. In the centre of the problematic we find the Relative Stability principle. The fixed formula of quotas distribution between member-states reflects the fact that European fishermen representation is still linked to national and local communities. But this territorial logic is in perfect contradiction with the development conditions of a free market (as supported in the Treaty). In fact, free movement of capital and the “Free Establishment” principle rest under a different logic [17,18].

“Quota-hopping”, usually understood as the flagging of fishing vessels in order to fish against the catch quotas of another country, is a by-product of CFP. By purchasing vessels and quotas in different countries, some fisheries enterprises act like perfect multinational firms capturing fishing stocks that were supposed to belong to national fishing communities.

UK situation gives a “good” example [14,17]. Although not restricted to this member state, it is the case of UK fleet that has attracted the most foreign investment, especially from Spain and Netherlands, and gave the phenomenon visibility for discussion. Something like 25% of British quotas were held, in the end of the nineties, by foreign-owned quota-hopping vessels.

This situation represents an important critic of the stakeholders to the CFP rules. They attacked the way the quota system is being circumvented by the so-called “flag” ships, which are vessels owned in one country but registered in another to allow access to its waters.

LESSONS FROM QUOTA HOPPING

“Quota-hopping” analysis may give important lessons for CFP reform [19]. The first lesson has a special interest for several Social Sciences, from Sociology to Politics, from Economics to History. In fact, this is a good field to investigate the dichotomy between a national oriented policy and the process of de-territorialisation arising from single market construction. We can observe how quota hopping emerges under the incompatibilities between the transnationalization process promoted through the “Europeanization” of EU policies and the territorial logic claimed by the national governments.

In this context, an important issue is revealed that, perhaps, surmounts the CFP, itself. That's the pure question of democracy: how can economic powers, in the process of market development, pass over the political decisions made by the democratic, elected institutions? And, in a certain sense, surmount the objective of cohesion that was implicit in the supranational management? In such a policy, both government and non-governmental agents no longer have the monopoly over the political agenda. CFP is defined through permanent interactions and negotiations. The non-territorial logic of EU governance challenges the social order inherited from European welfare states. These transnational actors, using EU rules, move permanently in the search of more favorable conditions and profits. This mobility of capital encourages more competition in the European fisheries sector, and, at the same time, raises more social uncertainty in the Member states [14].

So, economic and social actors in the EU are no longer subject to one political authority that is able to guard the values of justice and equity. It seems that there are some actors who are playing “the rules of the game”, but, at the same time, surmounting the power of elected governments. The dynamics towards trans-nationalisation encourages a diffusion of power and blurs the exercise of political democratic elected administration.

THE DEBATE ON RIGHTS BASED MANAGEMENT

Quota-hopping analysis highlights another important subject for the future of Common Fisheries Policy: the issue of Rights Based Management [20,21].

All fisheries management systems in the world have introduced some form of use/access rights to face the problems derived from the “common property” nature of fisheries. The idea of



creating markets for fishing rights as a means of internalizing the externalities derived from the common property nature of fisheries have received considerable attention by the founding fathers of Law and Economics and Fisheries Economics such as Coase, Scott and Christy. The solution is to create a market of individual transferable quotas (ITQs) and confide in the self-regulation of such a system to conduct the fisheries to the economic efficiency and to promote inter-temporal sustainable use of resources.

There are several possibilities of doing this. In general, we first need to determine the TAC that guarantees the sustainable use of the fish stock and then we can divide this total amount in several unit quotas that are distributed between the fishing enterprises. A market for quotas can also be created. The objective is that, after some time, the property rights will be driven to the most efficient agents, those that can allocate the resources in a perspective of optimal sustainable use along the time. Because they are the “real owners” they will internalize the effects of externalities.

Rights Based Management schemes have already been experimented in some specific fisheries and localizations. These experiences have a lot of teaching results about good practices of sustainable fisheries management and also about the limitations/ risks of these tools. These conclusions are fundamental to explore the feasibility of these tools as instruments of conservation in the CFP [22, 23]

This kind of economic methods has a special advantage in the sense that they introduce mechanisms that should conduct the fisheries to the efficiency, eliminating the less efficient producers and changing, effectively, the agents’ behavior.

ITQs are usually considered the best regulation choice on efficiency grounds. Granting the fisherman an individual quota may reduce the incentives to race for fish. We can expect:

- benefits at the capacity level and fishing effort rationalization,
- reduced fleet size and optimal vessel configuration,
- flexible and extended fishing seasons,
- higher catch-per-unit of effort.

This may, also, enhance the quality of landings and improve markets and safety operations by avoiding the landings glut, by reducing storage costs and so on.

But there are also a lot of problems. Professor Copes, in the mid 80s, when the first experiences with ITQs were evaluated, referred the problems of property concentration and, of course, the consequent problem of unemployment. After a period of change of quotas in the market, the problem of monopolization of the sector is well documented in several fishing-cases analysis. The number of owners tends to decline in time and there may be widening income disparities.

The unemployment is a huge difficulty of this method. The abandonment of the less efficient producers creates a lot of difficulties in some coastal areas where the mostly dependent on fisheries populations live. Given the poor capacity of inter-professional mobility of many fishermen, the introduction of these methods accelerates the social crisis in those depressed maritime worlds and put in danger some important cultures and ways of living.

We can also introduce other important issues. One relates with the mechanism design of this kind of methods. For example: How can we make the initial division and distribution of quotas? A “Grand-fathering” system? Auctions? Should the initial distribution take account of “historic catches” from the companies? And what about those companies that, in a certain moment, did not enter a certain fisheries, but has now a real interest in the business? For those who were in the initial distribution, the quotas seem like a “windfall gain”.

Owners of initial quota will sell at a price representing the full present value of the stream of rents generated, that is, the ones wishing to enter will have to pay, in advance, the full value of resource rents – it’s what we call a “transitional gains trap”.

According to Ronald Coase, this is not a problem, because what is important is the final result. Something like the “Invisible Hand” will drive the system to the best equilibrium solution. And in the short time? What are the social and political reactions to these uncomfortable situations?

Also, the problems of monitoring. Usually, economists highlight these methods because they introduce some kind of self-regulation. In fact, the sense of ownership should give the property-rights users, the real perception that the results of their actions will affect the net economic benefits that results from resource utilization. So, they should manage the resources in a



sustainable way. But, the reality shows that, without a government control policy, a lot of problems subsist, including data fouling and quota busting, discarding, more intensive utilization of best fishing grounds, etc.

And, of course, the problem of rents distribution: the issue of *equity vs. efficiency* always marking the debate in Economics. The economic theory proves the equivalence, in terms of efficiency, between the pigouvian tax and a scheme of ITQs, but the distribution gains between agents is still different. In the first case (pigouvian tax), the rents are optimized by the regulation Agency and, in the second (ITQs), rents and welfare gains are distributed between the private agents.

Besides the theoretical discussion on efficiency grounds, still persists the practical, fundamental question. Rights based management can improve the efficiency in fisheries management. But, who will ultimately receive the gains of sustainable use of resources. How will the rents be distributed? Who are the winners, who are the losers? "The winner takes it all?"

CONCLUDING REMARKS

What can we conclude about the possible generalization of these Rights Based Management schemes in the CFP? The principle of Relative Stability, which guides the allocation of fishing possibilities to the EU members, is, as we saw, an exemption from the internal market that is embedded in the CFP. However, the quota hopping is a signal that the agents circumvented this principle of territorial definition of rights. Perhaps, by setting up a transparent system for transfers of fishing rights, member states could more easily regulate and monitor such trade in use rights [24, 25]

Since quota-hopping can be taken as the evidence of a desire to trade fish quotas at the EU level, we might think that a lot of inefficiencies are resulting from the actual regime of management and expect that in a new free regime of trade a clearly reduction in transaction costs would result. Of course, that would result in more economic efficiency. But, the issue of introducing a more liberal property rights trade system will have to confront the distributional effects of such a proposal.

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