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New management issues within  
the reformed Common Fishery Policy:  
implementation and socio-economic impacts

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**ITQS, COMMON FISHERIES POLICY REFORM AND**  
**STAKEHOLDERS PERCEPTIONS**

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**ABSTRACT**

In the early 2010s 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 around two time sustainable levels. Overcapacity and overcapitalisation was identified as the principal failure of the Common Fisheries Policy (CFP). This conclusion may be important in the discussion about the on-going CFP reform and about the tools to get sustainable management.

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Rights Based Management schemes have already been experimented in specific fisheries and localizations. The practical indications and lessons given by these experiences are fundamental to explore the feasibility of such tools as instruments of the conservation and management policy. The purpose of this paper is to continue the debate. A special attention is given to the possibility of introducing a more focused approach on Rights Based Management, in the form of ITQs (Individual Transferable Quotas) in the CFP management regime.

Key Words: Fisheries, Individual Transferable Quotas, Common Fisheries Policy, Reform, Stakeholders Perceptions

JEL Codes: Q22, K11

## **Introduction**

Common Fisheries Policy did not delivered sustainable use of fish resources in European Union. In the early 2010s 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 around two time sustainable levels. Overcapacity and overcapitalisation was identified as the principal failure of the Common Fisheries Policy (CFP).

After two re-evaluations (1992, 2002), a new reform of this common policy was scheduled for 2012. With the publication of the “Green Paper” on the Reform, the European Commission went on launching a wide consultation to the national administrations, stakeholders, researchers and other interested people. The objectives were to discuss the current problems of the Common Fisheries Policy and to explore the alternatives and the ways forward the new reform of fisheries policy.

The main purpose of this paper is to continue this debate. It is made of four points: In the first point, we introduce the basic theoretical framework of Individual Transferable Quotas. In the second point, we develop the analysis of the Reform proposals and, in the third point, a critical review of ITQs introduction in European fisheries is made. Finally, in the form of an exploratory analysis, the paper approaches the Portuguese case. The objective of the proposed research is to report the different perceptions of the Portuguese stakeholders (including fishermen, vessel owners, administration, consumers and NGOs) about ITQs, in the context of CFP reform.

### **1. Rights Based Management Schemes**

The origins of modern Fisheries Economics can be traced back in the 50s with the papers of Gordon (1954), Scott (1955) and Schaefer (1957). In his seminal paper “The Economic Theory of a Common Property Resource: The Fishery”, Gordon argued that, within a situation of open access and competition, the market would not lead to the most efficient solution in resource use. The common property nature of fish resources and the presence of externalities in the capture process implied that, in an unregulated fishery, the result would be the expansion of the industry to a point of economic, even biological, overfishing.

To face the problems derived from the fisheries “common property” nature, all fisheries management systems in the world have introduced some form of access-use rights. The idea of creating markets for fishing rights, as a means of internalizing the externalities, received considerable attention by the founding fathers of Fisheries Economics such as Scott and Christy. To create a market of Individual Transferable Quotas (ITQs) means to 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, after determining the TAC (total authorized capture) for a certain stock, one can divide this total amount in several unit quotas to be distributed between the fishing enterprises. A market for quotas can be created. The objective is that 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. The rationale is simple: because they are the “real owners”, they will internalize the external effects.

These economic methods have 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. So, ITQs are usually considered the best regulation choice on efficiency grounds. Granting individual quotas to the fisherman, the regulator may reduce the incentives to “*race for fish*”. One 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 ITQs experiences were evaluated, highlighted the problems of property concentration and of unemployment. After a period of quotas trade in the market, the problem of monopolization of the sector is well documented in several fisheries. The number of owners tends to decline in time and there may be widening income disparities.

The unemployment is also a consequence of this method. The abandonment of the less efficient producers creates a lot of difficulties in some coastal areas where the populations, mostly dependent on fisheries, live. Given the poor 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.

Other important issues can be introduced. The first one relates with the mechanism design of this kind of methods. For example: How can we make the initial division and distribution of quotas? With a “Grandfathering” system? With auctions? Other? Should the initial distribution take account of “historic catches”? And what about those companies that, in a certain moment, did not enter a certain fisheries, but have now a real interest in the business? For those who were in the initial distribution, the quotas seem like a “windfall gain”.

Note, also, that the owners of initial quota may sell them at a price representing the full present value of the stream of rents generated. That means that the ones wishing to enter will have to pay, in advance, the full value of resource rents – something like a “transaction gains trap”.

Relevant are, also, the problems of monitoring. Usually, economists defend these rights based methods because they introduce some kind of self-regulation. In fact, the sense of ownership should give, to the property-rights users, the real perception of the results of their actions, in the net economic benefits resulting 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.

For “coasians”, this is not a problem, because what is important is the final result. But, what can we expect in the short time? What are the social and political reactions to these uncomfortable situations? 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 pigouvian taxes and a scheme of ITQs. But the distribution of gains, between agents, is still different. In the first case, the rents are optimized by the regulation Agency and, in the second, rents and welfare gains are distributed between the private agents. Besides the theoretical discussion on efficiency grounds, still persist the practical questions: Rights based management can improve the efficiency in fisheries management but who will ultimately receive the gains of sustainable use of resources? How will be distributed the rents? Who are the winners, who are the losers? The winner takes it all? A policy, a regulation scheme, a political reform - *to whom?*

## 2. On the Reform of the Common Fisheries Policy

Some elements of the CFP were reviewed in 2002 but CFP has not delivered sustainable exploitation of the resources. Conservation policy failed. The economic fragility of the sector, reflected in poor profitability and declining employment, was the result of a special conjunction of over-investment, rising costs and diminishing resource stocks.

But CFP had positive results. It has managed the resources and contained conflicts at sea, provided some degree of stocks stability 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. 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 shared between a large numbers of enterprises, 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, promoted over-supply of capital in an already over-capitalised industry.

These conclusions were reflected in the referred study commissioned by the Pew Environment Group in the yearly 2010s, to assess the economic, environmental and social impacts of the Financial Instrument for Fisheries Guidance, from 2000 to 2006 (Report of Poseidon Aquatic Management Ltd, 2010). The study found that the key objective of the 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.

So, a reform was needed. The necessity of a corrective intervention of public policy in order to approach the socially efficient solution in resource use was undeniable. After a long process of discussion, the Commission published a draft that contained the fundamental guidelines for the reform of 2012.

The fundamental purpose of this point of the paper is to make a balance of the principles and aspects that were maintained and the new elements that were introduced (or simply changed).

In what relates to the *non-changed* principles and elements of the previous Conservation and Management regime, we highlight the following: First, it is maintained the fundamental principle of equal access of all fishing vessels from Member states to all the resources of UE waters, with the reservation of access for the nationals of each



Member state, up to 2022, to the waters and resources in the area of the 12 miles (territorial sea), without prejudice of possible neighbors' agreements. That means, at the same time, the commitment with the equal access principle and the derogation of the basic principle of free access<sup>5</sup>.

Interesting is the maintenance of the Relative Stability principle and the key of quotas distribution based in the historic report of captures (with some capacity of trade among Member states). The system of TACs and Quotas is maintained as the basic regime of quantification of the fishing possibilities, but these expressions disappear.

So, it seems that the fundamental principles: a) free access with partial derogation; b) a system of fishing possibilities distribution based on a perspective that wants to make the equilibrium between the economic efficiency of the fisheries in the long term with the social sustainability in the coastal areas in the medium term - all that was the center of the initial Regime, are not changed, even if the designations are substituted.

Besides, the innovations appear, at several levels, in this reform proposal. The central objective of CFP is to get sustainable European fisheries in environmental, economic and social terms. Note the order of the expressions; it has a clear meaning. Up to 2015, the stocks will be explored in a Maximum Sustainable Yield (MSY) basis. Multi-annual plans will permit the Member states to establish conservation and management measures that tends in bill the relationship between the state of the stocks and the needs of the fisheries. These measures should be based in an eco-systemic approach and supported in the principle of precaution.

An important aspect of discussion, in this new reform, is discarding/sea-devolutions. A gradual prohibition of devolutions is to be developed. That includes the rejection of species subject to capture limits. Fish with inferior dimension than the minimum stipulated for fish caught cannot be sold for human consumption.

Most relevant: It is proposed the introduction of a system of *Rights Based Management* tools: the concession of transferable fishing permits, from 2014, for drag-vessels and other fleet units with more than 9/12 ms. That means transferable fishing concessions for large scale fleets, with transferability at national level<sup>6</sup>. The concessions invigorate powders for a minimum period of 15 years and institute the right of using individual

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<sup>5</sup> The CFP reform maintains the limitation of the fishing activities in the area of 100 miles around Azores, Madeira and Canarias, up to 2022, for the embarkations registered in those areas of EU ultra-periphery.

<sup>6</sup> The species included are the ones for which the fishing possibilities are established, with the exception of those that were considered in previous fishing agreements.

fishing possibilities. They can be transferred or rented inside of a Member state and, if there's authorization, can even be transferred for another Member state. Each Member can constitute a reservation of 5% of fishing possibilities and can introduce taxes for the use of ITQs. The fundamental objective is that the more efficient companies will buy ITQs. The abandon of the weakest agents will grant a reduction of the fleet without public supports to the vessels retirement.

The European Fisheries Fund will have an endowment of 6,7 million euros for the 2014-2020 period but there is a strong intention that inefficient subsidies are to be eliminated.

In the domain of aquaculture, an Advice Board is created. The Member states should elaborate strategic programs to develop aquaculture and to eliminate administrative obstacles.

The role of OP (Producers Organizations) is reinforced, namely in terms of optimization of production, obviating undesirable captures, of finishing the system of retreats and reinforcing the storage mechanism for subsequent trade in the market.

The UE will defend in the Regional and International Fisheries Organizations the same principles that are persecuted in the internal market. They also propose new mechanisms in the management of international fisheries (for example, the possible introduction of taxes of access in the High Sea). The Agreements with third countries are substituted by Sustainable Fishing Agreements, presupposing a larger financial participation of private vessels' owners.

The esteemed *Good Governance* will imply, also, a clear definition of the responsibilities at the different scales of decision and execution of CFP (local, regional, national and international) and a wide participation of the stakeholders. A new encouragement in the control and enforcement of fishing activities and the main responsibility of the state with pavilion flag are considered in those commitments.

### **3. “Relative Stability” and ITQs**

Rights Based Management schemes have already been experimented worldwide in some specific fisheries and localizations. These experiences have a lot of teaching results about good practices of sustainable fisheries management and about the limitations/ risks of these tools. As we said, one of the fundamental changes that are proposed by the Commission is the introduction of Individual Transferable Quotas as a

tool of intervention in the regime of management and conservation of European fisheries resources. So, the evaluation results of those referred experiences (made in several studies) are fundamental to explore the feasibility of these tools as instruments of conservation in the CFP.

Besides the problems with ITQs management that we underlined in the first point, a critical review in this specific context suggests the following comments:

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 fishing effort reduction and of adapting it to the existing resources; a better application and enforcement of common rules; the stakeholders' involvement.

But some problems subsisted. In our perspective, in the core they had to do with the persistence of conflicts between objectives. One of the most relevant is the problem of the contradiction between decreasing fishing effort and the need of maintenance of jobs and 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. This means that the fundamental issue to discuss is the so-called Relative Stability principle.

The principle of Relative Stability, which guided the allocation of fishing possibilities to the member states, can be seen as an exemption from the internal market that is embedded in the CFP. In fact, the relatively fixed formula of division of quotas between member states stresses the necessity of considering the social objectives of the CFP. This formula reflects several aspects like employment, historic catches and level of dependence from fisheries of certain coastal areas. The Stability Principle creates some kind of territorialisation of fisheries policy not permitting trade of quotas between member states. This is a special method to sustain the equilibrium between the sector efficiency, in the long term, and the necessity of getting some social balance in the coastal areas, in the short term. This stability in fisheries operations is the possible antidote to generalized "social crisis" disease. And, of course, the introduction of a liberal system of tradable fishing permits is going to create a lot of difficulties in the maintenance of the Stability Principle, even if the Commission does not make such a reference.

There are signals that the agents circumvented the principle of territorial definition of rights. See, for example, the so-called "quota-hopping" problem. "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<sup>7</sup>. 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. We might think that a lot of inefficiencies are resulting from the previous regime of management and expect a clearly reduction in transaction costs in this new free regime of trade. 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 *coasian* proposal. In this sense, we are still confronted with the fundamental question: a reform to whom?

Reducing the fishing effort without subsidies for vessels retirement is, clearly, a result that the Commission can see with good expectations. But to explain this to the agents is very difficult and probably creates a huge political reaction. So it seems that this cannot be put to stakeholders' discussion in a so "cruel" manner as made by the Commission. Some political sensibility is needed. Also, it seems that the role attributed to the POs (Producers Organizations) in the regularization of markets of production and trade of fisheries products will be clearly reduced in such a liberal proposal.

#### **4. Final Remarks: the Perceptions of the Stakeholders**

Our research project intended to discuss the perceptions of the Portuguese stakeholders about these fundamental changes. Then, this research-program included a special battery of questionnaires and interviews with the representative stakeholders to evaluate their different views on this question. At this time is not yet possible to make the analysis of the material that was arrayed.

Nevertheless, some exploratory results can be announced. We've been discussing these themes in some informal forums (*Tertulias*) with the presence of several stakeholders representatives. We highlight a specific Portuguese problem that was always stressed: An important issue that is posed by some Non-Governmental Organizations is the lack

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<sup>7</sup> UK situation gives a "good" example. 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.

of differentiation in the application of these regulation schemes to different segments of European fisheries. In the case of Portugal, several ecologist organizations (Sciaena and LPN, for example) put the specific problem of *artisanal* fisheries. These coastal fisheries have no important effects on unsustainable fishing and the introduction of such a scheme of ITQs could easily put the segment in a situation of monopolization. A real problem of large unemployment is expected, augmented by the “dissolution” of important POs that are active actually. Fishermen and vessel owners’ organizations seem to sustain these preoccupations.

As we said in the introduction, the main purpose of this paper is to continue the debate around the reform of the Common Fisheries Policy of E.U.: making the repertory of the maintained guidelines and the fundamental changes introduced in this reform; discussing and evaluating their relevance and potentialities, as well as their difficulties and risk factors; with a special attention to the possibility of introducing a more focused approach on Rights Based Management.

Our fundamental conclusion is that *sustainability* is at the heart of the proposed reform. Not only in terms of fish stocks regeneration, but also in social terms. This is the bulk question: how to balance those objectives of latent contradiction. In this context, the role of Individual Transferable Quotas in the Management and Conservation Regime, even if some advantages are considered, still put more issues to discuss and risks to be over-mounted.

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