

THE ICELANDIC FISHERIES MANAGEMENT SYSTEM AS AN EXAMPLE FOR EU FISHERIES?

LEGAL ASPECTS AND CONSTRAINTS

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Abstract

As the declining of fish stocks can be observed worldwide, different fisheries management systems have been introduced. One of these systems, based on Individual Transferable Quotas (ITQ), has been implemented differently in many countries with various results due to the specific management constraints and legal particularities of each country. As an example, New Zealand and Iceland are both using ITQs in their fisheries. New Zealand has experienced problems with business concentration, but there are very few disadvantages in the Icelandic Fisheries management system. Contrary to other ITQ managed fisheries and in comparison to other fisheries management systems like the one that has been implemented in the European Union (EU) with the Total Allowable Catch (TAC), Icelandic fisheries are well managed.

Acknowledging that the EU management system has shown its limits with a constant observation of the depletion of EU fish stocks, and the tendency of EU operated vessels to fish in developing countries through bilateral agreements, it appears now that it is necessary to find a new way of considering managing fisheries management in the EU. The EU's approach of sending its vessels away to the south may lead in the end to the depletion of the few remaining fish stocks currently not overexploited, like it has been the case in Mauritania.

In the aim to think about a worldwide sustainable fisheries management system, the responsibility of the EU as an international maritime actor can be emphasized. The example of Icelandic Fisheries could be used to propose a new form of fisheries management for the EU, as it has shown its efficiency and is quite close to Europe.

This paper will try through an analysis of the advantages and disadvantages of the Icelandic Fisheries Management system and the reasons of the failure of the EU Fisheries management system to imagine a new model of sustainable fisheries that could be adapted in the EU by searching if such a model could at least be established. In the end, if such a model is not achievable maybe a mix of different systems should be considered to bring up sustainable fisheries to the future generations.

1. Introduction

“The fishermen know that the sea is dangerous and the storm terrible, but they have never found these dangers sufficient reason for remaining ashore”

This is how Vincent van Gogh described the need for men to sail away to bring food to their homes.

Fishing has always been a principal source of food for humankind.¹ Fish brings energy, proteins, amino acids, iron, calcium, phosphorus, vitamins A and D. It helps to enrich the food of those whose daily meal is scant and who eat mostly cereals, thereby contributing to healthy eating habits and protection from diseases linked to an unbalanced diet.

Unfortunately, the fish productivity of the oceans depends on various factors such as water depth, altitude, currents, the proximity of the coasts, amount of phytoplankton (Le Sann, 1995). It is important to stress that human activity strongly influences the quality of fish stocks in addition to these natural factors. Pollution, global warming and particularly overfishing deeply changed the composition and the distribution of fish stocks worldwide. The challenge facing the international community is thus to find methods to preserve our fisheries.

Today more than ever it is urgent that policymakers from every nations of the world work to mitigate the influence of human activities on our ecosystems before it is too late. Experts note 70 percent of the world's fish stocks are either fully exploited, overexploited or recovering (FAO 1997).

One of the problems with fish is that it is an open resource accessible to everyone, thus leading to what Hardin (1968) described as “the tragedy of the commons.” Because fish stocks are of common use to everyone, fishermen consistently compete for access, which leads to the depletion of the resource. Many management tools have been set up to fight overfishing: technical measures like limitations on the number of days fishermen can remain at sea, minimum mesh sizes (gear regulations), minimum allowable sizes for individual species, closed seasons, closed areas, or more recently limits on the total amount of fish that can be extracted from particular areas. This last type of measure, also called “property rights arrangements in fisheries” (Arnason 2005), is primarily based on Total Allowable Catches (TACs)² like it is the case in the European Union fisheries in the Common Fisheries Policy (CFP) and those introducing Individual Quotas (IQs)³ or Individual Transferable Quotas (ITQs)⁴ like it is used in Iceland, New Zealand, Netherlands and many other countries in the world.

ITQs are commonly (Eythorsson, 1996, Arnason, 2005, Anderson et al. 2009) acknowledged as being the management tool of the future—a fact confirmed by studies conducted in the fisheries where they are in use. This might be the only fisheries management system employed all around the world that can face the challenge of fighting overfishing with such a degree of success (OECD 1997, Arnason 2005, Shotton 2000). This is especially true when compared to the results of the CFP in the EU, which is commonly considered a failure in fisheries management (Cooper 1999). ITQs have helped to decrease the fishing effort and the fleets and aid in the recovery of previously depleted stocks.

How can the EU leverage the success of ITQs to transform its CFP into a more economically efficient and a sustainable fisheries policy? What are the advantages and disadvantages of fisheries managed with property rights such as ITQs? Could the legal framework regulating EU fisheries at least be modified to promote this kind of management system throughout EU fisheries? What management system should be used as a comparison?

The European Commission recently issued a Green Paper⁵ on a future reform of the CFP, sparking significant public debate that will be summed up by the Commission in the first half of

¹In 1994, humans consumed much more fish than they did pork or chicken—70 million tons. (Greenpeace, *The End of Fish*, 1994)

² The total allowable catch (TAC) is a catch limit set for a particular fishery, generally for a year or a fishing season. TACs are usually expressed in tonnes of live-weight equivalent but are sometimes set in terms of numbers of fish. (OECD, 1998)

³ A quota (possibly a percentage) of a total allowable catch (TAC) is assigned to an individual, a vessel or a company. If an individual quota is transferable, it is referred to as an Individual Transferable Quota (ITQ). (OECD, 1998)

⁴ A type of quota (a part of a Total Allowable Catch) allocated to individual fishermen or vessel owners and which can be sold to others. (OECD, 1998)

⁵ COM(2009)163 final, 22.04.2009 Green Paper, *Reform of the Common Fisheries Policy*

2010. A draft proposal for a new basic regulation will then be presented by the Commission to Council and the European Parliament along with all other legal base proposals in the context of the new Financial Framework after 2013. Although the Icelandic Fisheries Management system has been using quotas since the early 1980s it is only since 1991 that a complete ITQ management system has been in place in Icelandic fisheries.⁶ Many studies about the influence of introducing ITQs in Iceland emphasise economic benefits, thus conciliating the balance of managing the resource and the social issues linked to the fishing industry (Arnason 2005). Some authors claim ITQs had dramatic side effects on some populations (Eythorsson 1996, 2000). However, Iceland's experience with ITQs is generally⁷ acknowledged as being positive (Danielsson, 1997, Arnason 2005), and could be used as a model of comparison to EU fisheries and thus serve as the basis for CFP reforms in the context of the debate launched by the Commission in the Green Paper.

This paper is broadly organized as follows: First, the legal framework on which the Icelandic Fisheries have been organized will be reviewed and analyzed to understand why they are globally considered to be well managed. It is then necessary to present the actual CFP and then evaluate reasons if it has failed. These concepts will help underscore why the CFP is in dire need of change, what the EU can learn from the Icelandic experience and the obstacles to the adaptation of an ITQ-based management system like the one that is currently in place in Iceland. I will then summarize the main results of the observations that have been distinguished in the paper and explain my vision of the future of the CFP.

2. The Icelandic Fisheries Management system

2.1 The legal framework

Iceland is exactly the type of country where a strong and efficient fisheries policy had to be implemented to guarantee economic stability; protecting fish, protects the fishermen, their jobs and all the other activities linked to them. Because the Icelandic economy is heavily dependent on fisheries,⁸ policymakers had to create a management system palatable to the fishermen themselves (Danielsson 1997, Eythorsson, 2000). Fisheries management in Iceland is a public concern and many studies have already been conducted on the involvement of stakeholders in the making of fisheries policy in Iceland (Eythorsson, 2000). (This is furthermore one of the main reasons why Icelanders are not quite optimistic about Iceland joining the EU).

Before introducing ITQs, Icelandic fisheries regulated fishing gear or closure of fishing grounds as management tools. In the 1960s, fishing for inshore shrimp and scallop was subjected to licences, effort restrictions and catch quotas. TACs were also set for catches of the Icelandic summer-spawning herring in 1969 shortly after the collapse of the herring stocks. These TACs became quota vessels in 1976 and were finally made transferable in 1979. This concerned only the herring fishery. However, at the time, the depletion of fish stocks was thought to be caused by foreign vessels, which led Iceland to extend its coastal zone in 1975 by unilaterally declaring an exclusive economic zone (EEZ) of 200 nautical miles around its coast. This excluded foreign vessels from Icelandic fisheries and from Icelandic waters (writ large)take this out without explicit authorization (Eythorsson 2000, Matthiasson 2003). But it soon became obvious that the extension of the EEZ did little to prevent the depletion of Iceland's most important fisheries, because they were still a common property, forcing the Government to implement legal restrictions of fishing for Icelandic vessels. ITQs were therefore introduced gradually in most Icelandic fisheries,⁹ culminating in 1991 with the introduction of a complete ITQ system in all fisheries when the

⁶ With the *Fisheries Management Act* of 1990

⁷ However this will be discussed later on

⁸In 1993, fish products accounted for 55% of the exports of goods and services and 79% of the goods exported (Danielsson 1997)

⁹ See Runolfsson and Arnason 1997 for more details

Fisheries Management Act of 1990 came into force. Since then, numerous amendments have been made, the most recent of which came into effect in 2006.¹⁰ The Ministry of Fisheries—responsible for management of the Icelandic fisheries and the implementation of the legislation—issues regulations for each commercial fishing year, including an allocation of the TAC from each of the stocks subject to such limitations, based on recommendations from the Marine Research Institute. The Ministry of Fisheries usually follows these recommendations quite closely (Runolfsson and Arnason 1997.)¹¹

ITQs in Iceland are in fact vessel catch quotas representing shares in the TAC expressed in percentage. They are permanent, perfectly divisible and fairly transferable. Vessels are then allocated annual quotas in a specific fishery as a simple multiple of the TAC for that fishery and the vessel's TAC share denominated in cod equivalent terms, because Icelandic fisheries are a mixed-stock. This provides flexibility for vessels and limits discards. A vessel can transfer some of its quota between fishing years, but its quota is lost if it catches less than 50 percent of its total quota in two subsequent years and within the year, the net transfer of quota from any vessel must not exceed 50 percent. Undue consolidation of fishing rights (concentration) are prevented by the setting of upper limits¹² for the holding of quota shares in major fishable stocks by a fishing company or a group of companies closely linked by ownership. Furthermore, each fishing company or a group of companies is not permitted to hold more than 12 percent of the value of the combined quota shares for the stock utilized by TAC allocations. (Runolfsson and Arnason 1997, Ministry of Fisheries)

In addition to the ITQ system, all commercial fishing vessels must hold valid fishing licences. These licences are only issued to vessels already in the fishery in 1990, and are only transferable with the vessels.

It is also interesting to note that separate small boat systems have been introduced for boats less than 15 GT¹³ that can only fish with handlines or longlines. They receive quotas for the major deep water species and can freely transfer the quota within this system, but they cannot transfer these quotas within the common quota system. Iceland also respects the TACs set by international agreements¹⁴ for shared fisheries.

The Ministry of Fisheries collects fees for catch quotas (amounting to 0,4 percent of the estimated catch value) to cover the cost of monitoring and enforcing the ITQ regulations, and Iceland is one of the rare countries where the Fisheries sector receives almost no subsidies (Runolfsson, Arnason 1997, Danielsson 1997).

Some authors like Matthiasson (2003) stress that the ITQ Icelandic Fisheries management system was not a conscious choice of Icelandic Policy makers but more a last resort choice. Introducing regulations on fisheries to restrict access to them has been a governmental priority only once the fisheries had collapsed or were close to collapsing, which is more likely to succeed under these circumstances.¹⁵

2.2 Efficiency of the ITQs property rights in Icelandic Fisheries to ensure a sustainable future

2.2.1 A globally positive result concerning the recovery of the stocks

¹⁰ Law nr116/2006

¹¹ Except in the cod fishery (Runolfsson, Arnason 1997)

¹² See <http://www.fisheries.is/management/fisheries-management/individual-transferable-quotas/> for more details of these limits for each fishery.

¹³ Currently 700 boats (Icelandic Ministry of Fisheries)

¹⁴ E.g. the Northeast Atlantic Fisheries Commission (NEAFC) for the Atlantio-Scandian herring stock in the northeast Atlantic

¹⁵ He interestingly underlines that it only once the fishery is closed that ITQs are an obvious choice “as their transferability enhances a concatenation of quotas which in turn is a necessary condition for avoiding the danger of spreading the right to fish too thinly among vessels and firms”

Fish stocks suffer of depletion mostly because of overfishing. Overfishing is the result of too many vessels fishing too few fish. The Icelandic ITQ system which transform a common property into property rights, in addition to the other regulations like the Licence system tends to stop the incentive to invest in vessels. If the fishermen have a secure right on their catch they won't invest in powerful vessels in order to win the race for the fish because there is no more such race. It also avoids environmentally damaging fishing techniques like drift nets for example (some of them which are now forbidden by international agreements). Nevertheless, performances of the ITQ system are different depending on the fisheries. In the herring and capelin fisheries catches increased since 1975 (Runolfsson, Arnason, 1997). However, compared studies about the Cod Fishing Policies of Denmark, Iceland and Norway showed that whatever the management system in use, the efficiency of the cod fisheries appears to have been quite low and shows a declining trend since the 1960s (Arnason *et al.* 2000).

Another problem often discussed for the management of the stocks is Highgrading¹⁶ in mixed fisheries but it doesn't seem to be a big problem in Iceland (Runolfsson, Arnason 1997) even if recent studies tend to show different, but uncertain results (Kristoefersson and Rickertsen , 2009). It is therefore important to keep in mind that high grading under ITQs management can occur if using this kind of management tool in a near future in the EU.

2.2.2 *Compliance and enforcement*

No regulation can be efficient without sufficient enforcement and control, and so it is for fisheries management. Likewise, the cornerstone of effective legislation is efficient control, whatever the economic benefits; a system can be strong or weak, but if there is no control it will inescapably fail. In Iceland, enforcement of the Fisheries Management Act 1990 and related legislation is in the hands of the Directorate of Fisheries—a government body accountable to the Minister of Fisheries. The Directorate is responsible for the continuous monitoring of compliance with the Act, enforcement of laws and regulations relating to the handling, processing and distribution of marine products and collating and publishing data and other information relating to fishing and processing activities. The Icelandic Coast Guard, which reports to the Minister of Justice, monitors fishing activities in Icelandic waters, including surveillance of areas closed for fishing and inspection of mesh sizes and other gear related practices. The Fisheries Management Department of the Directorate issues commercial fishing permits, allocates catch quotas to Icelandic fishing vessels and maintains records of those rights. It also records quota transfers between vessels and checks that vessels do not fish in excess of their quotas. The department collects data on fishing and the catches landed by the Icelandic fleet and monitors compliance with rules on the weighing and recording of catches. (Information Center of the Icelandic Ministry of Fisheries, 2007). Violations occasionally occur but tend to be minor. (Runolfsson, Arnason 1997)

¹⁶ A practice of harvesting fish that tends to select the most valuable fish and leave the least valuable at sea which increases fish mortality.

Enforcement Body	Accountable to:	Responsibilities
Directorate of Fisheries	Minister of Fisheries	Monitoring of FMA compliance, enforcement of laws and regulations relating to the handling, processing and distribution of marine products and collating and publishing data and other information relating to fishing and processing activities
Coast Guard	Minister of Justice	Monitors fishing activities in Icelandic waters, including surveillance of areas closed for fishing and inspection of mesh sizes and other gear related practices
Fisheries Management Department	Directorate of Fisheries	Issues commercial fishing permits, allocates catch quotas to Icelandic fishing vessels and maintains records of those rights

2.2.3 Impact of the ITQ system on Communities

Some authors (see Eythorsson, 1996) claim that ITQ leads to concentration on quota holding in the urban southwest region and have an impact on various villages around the country some of which rely exclusively on fisheries, increasing unemployment. Some other authors (Runolfsson et al. 1997) respond that even if this might happen the decrease of the fleet due to ITQs will not have an impact on employment in linked industry, on the contrary the higher income of fishermen because of the economic efficiency of the system will create employment for other domestic services and industries.

Their studies on regional impact of ITQs even show that there has even been increased employment and catches. For them, the continuous depopulation of the rural regions can not be attributed to the ITQs and is not particular to Iceland. We should therefore be careful with these information.

Even quota concentrations doesn't seem to occur according to these same authors¹⁷, showing that the regulation setting upper limits on quota holdings works pretty well (Runolfsson et al. 1997), even if it can be noticed that the actual limits were only set in 1998 and these contradictory analyses dated back to 1996 and 1997.

Despite the fact that some questions might be discussed, further results show undeniably that ITQs globally did what they were designed to: help depleted stocks to recover and remain sustainable.

2.2.4 Unresolved issues and side effects of ITQs on Fishing dependent community and global sustainability of the resource

In spite of these globally positive results in term of economic efficiency some questions remain. Like the security of the "so-called" property rights: article 1 of the Fisheries Management Act of 1990 states that the fish stocks in Icelandic waters remain the common property of the Icelandic people. ITQs are therefore considered by scholars as property in the harvesting rights rather than property right. What about the impact of this insecurity in the future? Isn't there a risk that fishermen lose the incentive to act in a responsible way if they feel that they don't have a real

¹⁷ But Eythorsson maintain that THERE is concentration of the quota in the hand of the biggest companies

control on the resource? This tricky situation opens a classic debate over common property vs. private property. Can Policy makers give to individuals property rights on a common resource? How can the problem of the insecurity of ITQs be solved without admitting that by doing so it is in reality a right on a common resource that has been given? Is it possible to have the approval of stakeholders by officially admitting that it is only a right to harvest the fish in order to achieve sustainable management that ITQs are used? Can we then still speak of “sustainable” fisheries?¹⁸

Eythorsson (2000) who already expressed his views on Icelandic ITQs in 1996 remains sceptical about the near perfection of ITQs as a management tool, especially concerning Fishing-dependant communities. He emphasises that “the vulnerability of fishing communities, especially small communities with poor employment alternatives, has become more visible as several fishing villages have lost most of their quota as the owners have moved or sold out”. He however acknowledges that this situation is not only due to the introduction of ITQs but also finds its origin in changes in technology and markets.

ITQs globally improved the economic efficiency of Icelandic fisheries but the globalization of the fisheries leads fishing companies to be more and more of multinational ownership and Icelandic vessels tend to operate exclusively in international waters challenging the sustainability of international fisheries. If ITQs helped to achieve sustainability in fisheries under Icelandic control, they can’t guarantee a sustainable acting of Icelandic fishermen outside Iceland’s EEZ. So, maybe this leads to think that achieving sustainable fisheries is not only a national policy problem, but needs to find a solution in international policy making.

3. The Common Fisheries Policy of the European Union

3.1 Implementation of the CFP

It took many years after the creation of the European Union to achieve a real common policy for fisheries as the fishing matter is not clearly defined in the Treaty establishing it: it is commonly considered that articles 38 to 47 which regulate the Common Agricultural Policy are the legal references for fisheries. However the first steps are two Council Regulations¹⁹ that were adopted in the 1970s to guarantee an equal access to the community waters. At the time, the aim of the regulations, was initially to achieve the common market in fishing products, which is the principal reason why the EU was created. The main objectives of the CFP at the beginning are: to establish marketing standards, to stabilize market prices and avoid the formation of surpluses, to help support producers incomes and to consider consumers interests by providing for the specification of marketing standards by freshness and size categories for the main commercial species and also the fixing of guide prices and the management of marketing by producers organizations (Holden, 1994).

Establishing a real conservation policy only became an objective of further regulations. It was also not clear whether the Community had the competence or not in this field, but when the Member State’s EEZ fell under competences of the EU in 1977, the Community received international competences of the Member States (e.g. for negotiating fishing agreements). This increase in the competences of the EU is the result of an essential work by the European Court of Justice (ECJ)²⁰. It is also important to underline that the external fisheries policy is not an insignificant part of the CFP.

The CFP really flew off when the question of Portugal and Spain joining the European Community (EC) came on the negotiating table. With Council Regulation (EEC) No 170/83 of 25

¹⁸ This issues are also very well discussed by Eythorsson (2000)

¹⁹ Council Regulation (EEC) n°2142/70 of January 25th 1983 on the common organization of the Market in fishing products and Council Regulation (EEC) n° 2140/70 laying down a common structural policy for the fishing industry.

²⁰ See ECJ July 14th 1976 Cornelis Kramer, C-3/76

January 1983 establishing a Community system for the conservation and management of fishery resources a real common policy for fisheries was born by providing the basis for TAC's and national quotas. Regulation n°171/83 adopted the same day, defined the different fishing regions and the standard minimum mesh sizes which applied in each of them, minimum landing sizes and prohibitions of fishing for certain species in certain areas and limitations on the use of specific gears or vessels. The same year a policy to stop the increase of the fleet was put into place.

In 1991 the Commission already faces the failure of the first regulations in the attempt to prevent depletion of the resource and another regulation was adopted in 1992²¹, establishing fishing licences. But again, this new regulation is considered as a failure because it could not prevent the race for the quotas, the continuous depletion of the fish stocks and it could not fight against the Member States own interests. Stakeholders strongly mistrusted this new policy regulating their job and violations were quite usual. Even the Member States were not keen on respecting their legal commitments and the measures taken to decrease the fleet were not efficient enough to prevent overfishing: the CFP already suffered from a lack of legitimacy. (Cooper, 1999, Proutière-Maulion, 2007). But, even so, a new legislation had to be issued.

The actual legal framework is the result of Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy. This regulation strives towards the aim to achieve a sustainable development by implementing measures intended to control the fleet and the fishing activities. It is interesting to stress that at the time most of the world's fisheries were still in an alarming state of depletion. The fishing sector is still economically fragile making subsidies necessary. For fishermen, the introducing of fishing rights and the increase of legislation restricting their activity added to the constant depletion of fish stocks makes this policy difficult to understand and therefore to accept.

TAC's for each Member State are set in accordance with the principle of relative stability which means that each Member States' share of each Community quota should remain constant over time²² and are divided in four groups: the seven main species (cod, haddock, saithe, whiting, plaice, redfish and mackerel) all other species used for human consumption except herring, herring and at least species used at that time almost entirely only for reduction to meal and oil (blue whiting, horse mackerel, Norway prout, sand eel and sprat) (Holden, 1994). They are fixed on an annual or bi-annual basis by the Council of Ministers at the end of December after a long process involving many countries and organisations and are supposed to follow the recommendations of the International Council for the Exploration of the Sea (ICES) who brings together information on the state of the stocks from various sources.

*"The European Commission consults its own Scientific, Technical and Economic Committee for Fisheries (STECF), made up of national experts, and representatives from the fishing industry and other stakeholders on these opinions. Negotiations also take place with non-EU countries which have an interest in the same fishing grounds or stocks and relevant regional fisheries organisations. The Commission then analyses the various opinions and sets out proposals for the following year's total allowable catches and the conditions under which they should be caught. These proposals are sent to the Council of Ministers. The final decision regarding Total Allowable Catches, quotas and any related measures is taken by Fisheries Ministers at their end-of-the year meeting."*²³

However, it is important to notice that the actual CFP is not only made out of TAC's and that other conservation measures are part of it: e.g. fishing licences, mesh sizes, limitations of the days at sea... It is this whole approach of conservation that is being questioned today.

²¹Council Regulation (EEC) n° 3760/92 of 20 December 1992 establishing a Community system for fisheries and aquaculture

²² European Commission, 2009 see : http://ec.europa.eu/fisheries/reform/stability_en.htm

²³ European Commission, 2009 see http://ec.europa.eu/fisheries/cfp/management_resources/conservation_measures/tacs_en.htm

3.2. *The tragedy of the Common (Fisheries Policy)*

The CFP is commonly (Cooper, 1999, Daw *et al.* 2005) referred to as ‘the’ perfect example of the failure of policy makers on adopting conservation measures. There is no need to look further for the reasons of these allegations because the regulations adopted by the EU since 1983 obviously did little to prevent the fisheries stocks under its control from declining. Worse, the regulation didn’t achieve its aim to decrease the number of vessels operating in EU waters, thus leading to the crisis that is still dramatically happening in the fisheries sector all over Member States. (Holden 1994, Karagiannakos 1996, Proutière-Maulion, 2007).

The CFP mainly failed to achieve sustainable development in fisheries because TACs are set too high and the Council usually never really follow the scientific recommendations because of political and social pressure. Bycatch and discards (which are considerable and seem to be in this legal context unavoidable) are not efficiently reported and therefore distort the calculation of the TAC available for a fishery. There is a lot of fraud on declarations on the logbooks (product registered under a false name, false fishing zone) and there is an obvious lack of control and enforcement of the measures because it is the responsibility of each Member State to enforce the CFP in his waters. The Commission only controls the controls done by national authorities, and even if Community inspectors with limited powers exists they constantly have to face the stubbornness of the Member States own inspectors, because they want to preserve their competence in the control field (Holden 1994, Cooper 1996, Daw 2005, Proutière-Maulion 2007) . Another well-known problem is quota-hopping²⁴.

Finally, the CFP is clearly not accepted by stakeholders especially in fisheries dependant countries like France or Spain where these measures are not understood. This lack of legitimacy tends to justify, in fishermen opinions, the violation of the CFP measures because they feel that it their right to do so²⁵. After all, it is their living that is at stake. They feel particularly bitter about discards. Globally this feeling is due to the fact that stakeholders are deeply convinced that the “obscure bureaucracy in Brussels” took all these binding decisions without their opinion.

All these problems (illegitimate policy, setting of TACs that doesn’t follow the scientific recommendations, lack of control and difficulties to enforce the other conservation measures) are in fact linked to one deeper problem than the CFP itself: deficiencies of the EU political system, added to the uncertainty on fisheries science itself. Daw (2005) has identified three of them linked to the CFP:

a) the psychology of individual fishermen who even if they feel “concerned by warnings from the scientists, (...) are trapped in the race to catch their share of the disappearing fish before someone else does

b) the electoral politics of fisheries ministers at the Council of Ministers, because this legislative body of the EU is composed of Member States “democratically elected ministers, (who) by definition, are preoccupied with their likely popularity at home during the next election” who literally “water down” all proposed regulations. Daw also underlines the jealousy that occur between Member states on the allocation of quota therefore making it very difficult to achieve consensus,

c) there is a political devaluation of fisheries science.

It is very clear that one of the biggest problems is indeed in the legislative process. In the EU, there are many different procedures that lead to the adoption of regulations, depending on the legal basis which founds the action and the field of the considered action. Depending on the

²⁴ A procedure by which a vessel from one country obtains the right to fish from another country’s catch quota. This may involve the vessel registering in the second country even though for practical purposes it is operating from a home port. (<http://www.mijnwoordenboek.nl/EN/theme/AG/EN/FR/Q/1.html>)

²⁵ In January 2003 the number of serious offences against the fisheries regulations of the CFP rose by 12% between 2001 and 2002 (Fishing News, 10/01/03 p. 6 as cited by Daw, 2005)

procedure the Council of Ministers will have an increased part in the legislative process. But whatever the procedure, the only body of the EU institutional framework that really represents the interest of the EU and not only those of the Member States is the European Commission. But, the Commission has no power in the final adoption, it can only issue proposals. This might explain many things. When people angrily refer to “Brussels” they refer to the Commission a body they don’t understand, whereas the real problem lies in the unwillingness of the Council to follow its recommendations and the absurd quotas settings which have lead to this political fiasco known as the CFP. It is time to totally review the way of making policies in the EU, because the EC has only the power to establish conservation measures to harmonize the EU legislation but the responsibility to enforce the legislation is left to Member States alone, e.g, control measures.

4. The need for changes of the CFP

4.1 The Icelandic Fisheries Management system and the CFP : introducing ITQs in the EU?

The question of introducing quota rights in the CFP is often evoked when talking about a possible reform of the CFP (Hentrich *et al.* 2006, Andersen *et al.* 2009, Green Paper 2009). Iceland has been using ITQs in its fisheries for almost twenty years now. The studies on their efficiency can therefore be considered as quite reliable according to economists. But introducing a fisheries management system should not only be the search for economic efficiency: sustainability in an ecosystem approach along with social measures for fishermen should be the first criteria’s used by policymakers when using management tools.

It has been said that ITQs increase the economic efficiency of the fisheries, the quality of catch and restores previously depleted fisheries: Thinking of reforming the CFP cannot be done without studying carefully the disadvantages. The management tool alone, the ITQ can be considered as globally useful in the attempt to achieve sustainable development in fisheries management. But like every tool it has to be studied in the environment where it is in use. Results with ITQs are different depending on where they are in use and even if their global efficiency cannot be questioned. They also show different results depending in which of the fisheries they are used. In single species fisheries they tend to be more efficient than in multi-species fisheries because of the risk of discard.

Iceland, however seems to have found some legal solutions in order to prevent discard. Could this system be employed efficiently in EU fisheries? Even if the Icelandic Fisheries Management Act has been modified in 1998 in order to fight quota concentrations, sceptics maintain that ITQs lead to concentrate quotas in the hand of the biggest firms of the country, leading to unemployment in small fisheries dependant communities (Eythorsson 1996, 2000), even if some economists tend to deny it. Results on ITQs also depend on the research area: economists tend to be quite positive and optimistic about ITQs as a management tool for fisheries whereas as social scientists are more weary about the social effects on fisheries dependent communities, such as Iceland. It is however hard to consider if the social situation of some fishermen is a result of introducing ITQs or not. Therefore, if using the Icelandic system as an example for EU fisheries, these possible side effects should be taken into account in a precautionary approach. It is also necessary to underline that Iceland didn’t find a solution to fight high grading. (Kristoefersson, D., Rickertsen K., 2009).

What works in one country might not work in another. ITQs have also been used in countries with a really different legal system and institutional system e.g. Canada, New Zealand, the Netherlands among others. This makes the idea of introducing ITQs in the actual EU legal framework more difficult. Iceland is a small country with a quite common legal system, making adoption of regulations easy on a simply legal point of view. It is also easier to control the resource the smaller the EEZ is. As the EU’s EEZ is the biggest in world it can be emphasised that controlling such a large zone might be difficult.

Iceland's economy relies mainly on fisheries so the government had no choice but to introduce a policy that is accepted by the fishing industry. It is not sure whether they have been really taken account of in the policy making, but they are globally satisfied with it.

4.2 Institutional and political obstacles to a reform based on the Icelandic ITQ FMS

Iceland is a state; the EU is an I.O of a special kind made out of 27 member state, thus making the designing of any legal framework very complicated.

The EUs Competence on introducing property rights is uncertain, even if the actual EU legal framework allows the EC to take the measures because the management of the resource is an exclusive competence it is not sure whether it has the competence to force all member states to adopt ITQs (*Article 295 TEC*: This Treaty shall in no way prejudice the rules in Member States governing the system of property Ownership). The definition of property ownership under article 295 should therefore be specified. As ITQs are changing the juridical nature of fish which is no longer a common property it might be said that even if the Council adopts a legislation introducing ITQs as part of the TACs it seems hard that they will be accepted by all member states, the strongest opposition is in France. But if all the Member States approve this new way managing EU fisheries it might be in theory possible to introduce ITQs in the CFP as a general management tool along with the already existing measures.

Introducing ITQs also might affect the principle of relative stability because quotas wouldn't be allocated to the Member States but to individuals thus creating increasing tensions between fishermen of different member states. It is therefore not sure whether there could be a political consensus about it.

Even if some authors maintain that there is no concentration in Icelandic fisheries it is not sure whether this problem could be solved in the EU as well even by introducing legal upper limits of quota holdings because like in Iceland, firms are more and more multinational. The EU has already difficulties in preventing quota hopping, could it find legal answers to concentration? Iceland couldn't find legal answers to high grading this another challenge facing the EU.

Adopting regulations is mainly the task of the Council: the Commission has just a proposal role making policies difficult.

Also the Icelandic control system seems to be very efficient; but it seems easier to control its EEZ than the EU's EEZ because the zone that should be controlled is so vast; the EU should need a dedicated coast guard: but this is an idea that Member state doesn't even want to think about because they're afraid to loose their sovereignty, because they might loose their competence in this domain and member state doesn't like to increase the ECs competences even when this competence is shared and not exclusive. If such a control could at least be set in place what about the cost of such a control? Who will pay?

5. Conclusions and discussion

The Icelandic FMS is a good example for EU fisheries because it has been designed for a small country that might join the EU one day and share its resource within the CFP. ITQs are a globally efficient tool, but depending on the legal framework they are introduced in and the other conservations measures accompanying them, they have uncertain side effects, like unemployment in fisheries dependent regions, discards, concentration and high grading. Iceland however found remedies to some of them but couldn't find one for high grading which in the aim of achieving sustainable fisheries is problematic. Iceland is also a country with very few legal constraints in the designing of a conservation policy for its fisheries, so even if the nature of ITQs are on a legal aspect controversial by transforming a common property in a private right, the Icelandic government only had to face its fishermen. In the context of loosing their job because of the nearly

complete depletion of Icelandic fisheries in the 70s had nearly no other choice than accepting this new management tool, because it couldn't be worse anyway. Today, however questions on stakeholders involvement in the management policy appear. ITQs in Icelandic Fisheries didn't prevent Icelandic vessels to operate in international seas in a non sustainable way, letting the responsibility of the management of these fisheries to international organization.

The EU unlike Iceland is not a state but a jurisdictionally complicated object and its very nature is not easy to define, not a state, not an I.O. but something in between. This makes the designing of European policies for 27 Member States which kept their sovereignty on most subjects whatever the field very difficult. The conservation of the resource is a sole competence of the EU but many aspects linked to it still remain of the Member States competence domain. Introducing ITQs in EU fisheries might be legally possible in theory, but certainly not as it has been done in Iceland or other places. Remedies to the problems that Iceland couldn't find need to be found. Maybe the EU could only introduce IQs without transferability which would avoid the political problem. The importance of involving stakeholders in policy making is of the highest importance to legitimate this new reform of the CFP, which the consultation within the Green papers intend to do. This Policy cannot be done without also thinking of social solutions to the unemployment that will fatally occur when the fleet will decrease. To make Member States accept the global framework of a new CFP based on property rights maybe another scale of management should be imagined in order to be as close as possible to the ecosystem realities of each fishery and provide a general legal framework based on property rights without affecting the competence fields of member states. The tool used should also be adapted to the fishery especially when these are mixed or shared with other countries, especially third countries. The new framework should also take into account international fisheries management. As an emerging international force, the EU has to lead in achieving sustainable management in their fisheries worldwide. Property rights certainly cannot be used alone. Enforcement should also be increased; but all this questions will not find their answers in any reform of the CFP as long as Member States don't give up more of their competence to the EU to design the global framework and as long as they and the Council that represents them in the EU don't listen to scientific recommendations. The adoption of the Lisbon Treaty, who will increase the legislative power of the European Parliament by widespreading the co decision procedure, and increase the Commissions influence over enforcement of the policies are certainly a way to counter attack the Councils sometimes absurd policymaking, behind which are in fact the Member States. It is only at that price that Science and Policy for a sustainable future can be used in fishery management in the EU: by reforming not only the CFP but the global understanding of the EU itself as a necessary and unavoidable actor of tomorrow, in the policies of Member States but also in the international community.

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