FISHERIES POLICY AND THE COFRADÍAS IN THE BASQUE COUNTRY: THE CASE OF ALBACORE¹ AND ANCHOVY²

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Stream: Fisheries

1. INTRODUCTION

The conditions under which Man exploits natural resources have always depended on the type of institutional regime which is in force and the different forms of ownership established throughout history. Thus, natural resources have been and continue to be exploited within varying institutional frameworks, and, what is more important, under different regimes of ownership, all of which contributes to shaping both the behaviour displayed by the agents and subsequent allocations.

Four different pure ownership regimes³ exist, although in practice various combinations of these can and do occur. Thus, while in the case of *private ownership* property rights⁴ belong to one or several individuals (who are then responsible for managing resources), when it comes to *state owned* resources it is the State which regulates access and exploitation. *Common Property*⁵, on the other hand, is distinguished by the fact that exploitation rights belong to a clearly identified group of users who also have the right to exclude others from the exploitation and management of the resources. Lastly, there exists what is known as *open access* the main feature of which is the total absence of rights of ownership.

In the case of fishing grounds in particular, the theoretical scenarios most often applied are sole ownership (in which resources are efficiently allocated) and open access (usually involving the over-exploitation of resources and the dissipation

¹Thunnus alalunga.

²Engraulis encrassicholus.

³For further information, see the works of Stevenson (1991) and Surís and Varela (1995).

⁴The term ownership rights refers to a whole range of rules, regulations, customs and laws developed over time to govern rights of appropriation, use and assignment of goods and services (Scott, 1986). It may be interpreted to be a social relationship into which some are admitted into and some excluded from the making of decisions regarding the management and quiet enjoyment of resources (Surís, 1991).

⁵A clear definition of the concept of public property can be found in Ciriacy-Wantrup and Bishop (1975).

of revenue/yields). Sole ownership permits a distinction to be made between public and private property, not to mention, of course, the control mechanisms applied by public authorities in order to counteract self-interest on the part of the agents involved. It is a well-known fact, however, that the real circumstances surrounding most fishing grounds do not match any of the above-mentioned scenarios, not even common pool exploitation in the strict sense. Furthermore, it is worth pointing out that the terms "open access" and "common pool resources" have very often been confused in the literature. Indeed, the so-called "tragedy of the commons "⁶ is founded upon the confusion of these two terms, and at the same time fails to take into account the important role played by common pool ownership throughout the past and up to the present day. The error continues to persist and is clearly present in the works of such well-known and highly respected specialists as Howe (1979), Smith and Krutilla (1982), Hatwick and Olewiler (1986), Tietemberg (1988, 1992), Kula (1992), Bjorndal (19929, Fisher (19939 and Neher (1995).

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Just as it can be said that open access leads to inefficient⁷ allocation of resources, it must also be emphasised that efficiency or inefficiency are inevitable in any type of ownership. The fact is that neither the State nor the market is entirely successful at exploiting resources in a way which is sustainable in the long term. So that, although under sole ownership there is efficient allocation of resources, the actual putting into practice and monitorization of the policies for optimum use can pose serious problems and create perverse incentives for the economic agents involved. Likewise, it is a serious mistake to associate public management with inefficiency when it is true to say that empiric evidence shows that many communities of individuals have, for long periods of time and, furthermore, with success, entrusted the management of resources to bodies distinct from the State and the market. In other words, there are some common pool resources which are adequately managed (robust common pool resources)⁸ and there are others managed in such a way that leads to allocations which are totally inefficient.

⁶Hardin (1968) (a biologist by training) with a view to studying the problem of world population growth and the resulting need to increase food resources, put forward the view that the survival of the human race depends more upon moral than on technological changes, while at the same time identifying joint ownership as the root cause of the problem; to illustrate this, he used the famous example of the shepherds who freely loosed their flock into a grazing area open to all, thus erroneously equating joint ownership with open access.

⁷In the case of fishing grounds, inefficiency resulting from the absence of rights of ownership gives rise to overfishing and to the dissipation of economic revenues. First of all, the fishermen involved obtain lower revenues than they would if management were efficient (contemporary externality) and, further, over-exploitation of resources means that the benefits to be obtained by future generations are also diminished (intergenerational externality). To offset the previous situation, authorities sometimes attempt to prevent over-fishing by establishing efficient catch levels without placing any limit on the number of vessels allowed to compete on the fishing-grounds. This results in the problem of over-exploitation being replaced by problems of over-capacity and over-capitalization.

⁸The term robust common pool resource refers to that which has lasted over a period of time, having been managed in a sustainable fashion, guaranteeing an income for its owners as well as the continuation of resources. At this point, it needs to be made clear that the robustness of common goods need not necessarily be associated with paretian efficiency in the allocation of resources. After analysing a wide range of resources exploited as public property under a common ownership regime (CPR), Ostron (1991) discovered a set of regularities present in the majority of robust common pool resources: 1) membership and the extent of the common goods must be well defined, 2) rules of ownership and maintenance must suit local conditions, 3) agreements must result from group election, 4) mechanisms are present for control and sanctions, 5) the chance to solve conflicts at local level is readily available both for owners and/or arbitrators, 6) some minimum rights of self-management are recognised by outside authorities and 7) The nesting of organisations one within another is possible.

This paper aims to analyse Cofradía of the Basque Country's as a body which has in the past served to manage fishing resources under a common pool regime although we can no longer speak of common pool exploitation in the strict sense of the term, partly because of increasing outside interference. The Cofradía is made up of the artisan fleet and the surface fleet; the latter being the most important in terms of workforce and income; while it is the anchovy fishers of the VIII Division and the tuna fishers that form the basis of the Cantabrian⁹ surface fleet.

The main objective of this paper, therefore, is to investigate the role of the Cofradía in the management of fishing reserves especially with reference to the tuna and anchovy fishing grounds.

2. ANCHOVY AND TUNA FISHING

2.1 Anchovy fishing in the VIII Division¹⁰

On the Atlantic coast of Europe there are two stocks of anchovy: The anchovy of the Bay of Biscay (VIII Division) and the anchovy of the Atlantic coast of the Iberian Peninsula (IXa Division). The Bay of Biscay anchovy is considered to come under the management of a unit independent of the IXth Division stock (ICSE¹¹, 1996). For this reason we will limit our investigation to the first of the stocks mentioned.

The anchovy of the VIII division is fished by two fleets, the Spanish Cantabrian surface fleet¹² and the French¹³ deep-sea fleet. The first of these which has, for technological reasons, to limit its activity to the springtime, has been steadily decreasing in its number of vessels. The French fleet, on the other hand, which has been active on the fishing grounds since the mid eighties, has been enjoying spectacular growth, thereby bringing about a considerable increase in anchovy fishing, in spite of reductions in the size of the purse seiner fleet.

The relative importance of the Spanish fleet in the fishing sector has decreased considerably, from captures which made up 90% of the total in the eighties it has dropped to a level of 50% in the nineties. The Basque fleet is without doubt the most important, although its share in the catch has dropped from 70% in the seventies to the present-day 40%. Anchovy catches in the Bay of Biscay fluctuate greatly from one year to another. After reaching a historic high in the mid sixties, there began a steep fall which lasted through to the mid seventies. 1975 heralded a period of relative growth, which probably had to do with technological advances such as radar and sonar (Igelmo et al., 1984), from 1978 on, however, there was another steep drop in catches culminating in the historic lows of 1982 and 1986, 5,000 and 8,000 tm respectively. With the exception of 1984, catches in the eighties were very low; since 1990, however, recuperation has been strong, with a total catch of 40,000 tm being taken in 1993.

⁹Given the enormous difficulty of obtaining information relating to the entire Cantabrian fleet, we are obliged to take, as its representative, the Basque fleet, about which we have more exact data and which has followed the same general trend as the Cantabrian fleet as a whole. The Basque Country is situated in the northeast of the Iberian Peninsula therefore its shores are washed by the Cantabrian Sea.

¹⁰For further information on anchovy fishing, see Valle (1998).

¹¹International Sea Exploration Council

¹²The Cantabrian purse seiner fleet (more than half of which figures in the census of Basque country ports) fishes anchovy with purse seiner gear.

¹³The French fleet uses pelagic trawler gear.

$2.2 \operatorname{\underline{Tuna fishing}^{14}}$

Various types of research (DNA analysis, tagging of specimens etc.) carried out over recent years seem to confirm the existence of three separate stocks: the Mediterranean stock, that of the South Atlantic and that of the North Atlantic (ICCAT, 1996). Given that the Spanish fleet mainly fishes the North Atlantic stock, we made this the object of our investigation.

The Albacore stock of the North Atlantic is the main target species of the European fleets of Spain, France, the United Kingdom and Ireland and of Asian line fishers (from Taiwan, Korea and Japan). Spain, with its Cantabrian surface fleet, takes over half of the world catch in these waters.

The Cantabrian surface fleet¹⁵ takes as its prime objective the cohort of sexually immature specimens (up to 5 years) among the North Atlantic stock which migrate cyclically for feeding purposes from June to September. Since the mid eighties the French, Irish and British¹⁶ trawler fleets have been competing with the Cantabrian surface fleet for the cohort of immature specimens.

2.3 The regulation of anchovy (D. VIII) and albacore fishing.

In view of the above, in spite of signs in the Cantabrian surface fleet of common pool resource management of the fisheries in question, it is worth noting that the presence of legislation at various levels (European Union, Spanish State, Autonomous Regional Authority and the Cofradías) as well as the participation of other fleets not affected by Cofradía rules (the French fleet in the case of anchovy fishing and the British, Irish and French fleets in the case of albacore fishing), makes it extremely difficult to bring these fisheries under any of the regimes of exploitation mentioned above. However, it must be said that albacore fishing, in comparison with what, at least in theory, is the case with anchovy fishing, comes closer to a regime of open access, although, as will be seen in what follows, the presence of various restrictions on anchovy and albacore fishing enables us to declare that, at least lawfully, none of the fishing comes under open access. There follows a description of

¹⁴For further information, see Astorkiza, del Valle and Astorkiza (1997)

¹⁵The Cantabrian surface fleet fishes albacore using live bait or "Currican".

¹⁶France, Great Britain and Ireland all use drift nets and pelagic trawler gear. Although the level of their catches has not reached alarming proportions, their methods and catch strategy have caused great controversy and bitter confrontation. These new fleets are extremely versatile at switching objectives from one species to another but evidence suggests that they cause negative externalities since they are less selective and therefore discard a higher proportion of the catch than when traditional techniques are used. The problem has come to be regarded as a confrontation between countries sharing the same stock each fighting for a larger share. Important as this is, however, there also exists a problem of incompatibility between different fishing techniques. Apparently the two can not easily exist side by side because the different techniques interfere with one another, creating dilemmas which must be solved by regulation. According to various sources, the unit cost of ships using traditional techniques are significantly increased when the two types of fishing are taking place side by side, since the catch is reduced because of the tuna being coming up against the driftnets and subsequently abandoning the surface waters. Throughout the nineties, this incompatibility has caused numerous conflicts between different fleets, as well as frequent infringements of European legislation have been detected (this legislation prohibits the use of mesh drift nets over 2.5 km). It might be added here that due to lack of agreement within the Spanish Cabinet, the proposal for a committee ruling gradually to prohibit the use of mesh drift nets is still under debate.

the main regulations and agreements adopted at different levels to govern these types of fishing.

The United Nations Convention on Sea Law which took place in 1982 confirms the two main principles which had come to be accepted as customary norms from 1974 onwards. The first refers to the rights of sovereignty of the coastal nation within the 200 mile limit, which entitles it to explore, exploit, preserve and manage the riches of the seas. The second recognises the principle of freedom to fish in the open sea together with the power of the international community to take cooperative action to preserve and administer fishing resources.

The main aim of the Community Fishing Policy is to keep resources at sustainable levels such as will provide and allow for fishing to take place in Community waters. The policy of the preservation of species is accompanied by measures designed to restructure the fishing sector (modernization of the fleet, adjustment of fishing capacity to real fishing levels, redirection of fishing related enterprises¹⁷) as well as measures for organizing markets. In addition to clear support for the rational management of fishing resources, influence on competition, profitability and modernization of the fishing sector, the structural policy also seeks to enhance the quality of products and favour the use of selective fishing techniques.

The policy for the preservation of fishing resources is based on scientific and economic information provided by the (CCTEP) and the (CIEM). Stock levels are measured by biolgists whose findings, while not legally binding, are used by the Commission when fixing TACs for specific populations (including anchovy) and also in determining the respective national quotas.

The fact is that the establishment of TACs in many cases fails to control stock depletion. Also, in an attempt to prevent the over-capacity present in the community fleet, the community limits fishing to certain areas, as well as dictating the number and type of ships allowed in, the maximum catches permitted and the minimum size of the fished specimens. It is precisely the aim to reduce the fleet which calls for a change from rule 4028/86 in favour of rule 3944/90, which reduces the amounts available for funding new ship-building and the modernization of existing vessels while increasing aid destined to the reduction of capacity, and which also attempts to relieve the fishing effort in community waters, by favouring the setting up of mixed partnerships with a view to encouraging the movement of vessels, thereby contributing to market supply.

In fact, as far as the fishing target of the Cantabrian surface fleet is concerned, there is no TAC at all for albacore, whereas there is a TAC of 33.000 tm¹⁸ on anchovy, 90% of which corresponds to Spain by dint of the historic rights held by this country in this type of fishing. It must be borne in mind that the Spanish purse steiner fleet rarely reaches its assigned quota, whereas the French fleet as a general rule fishes over its quota. During the nineties, as a result of the bilateral agreements

¹⁷The problems facing the fishing sector in the community can be summed up in five points: 1) A manifest situation of overfishing in community waters. 2) Over-capacity of the fleet. 3) Increasingly difficult access to the waters of third party countries for ships belonging to the community. 4) A progressive fall in economic profitability. 5) The market for fish products shows a deficit. Europe is a net importer of fish products.

¹⁸The TAC on anchovy is determined according to the average catches in the sixties. Since 1988, coinciding with anchovy coming under study by the CIEM which has advocated lower TACs (in line with the catches taken in the eighties), although these recommendations have not been heeded by community managers. Furthermore, the proposed bioeconomic TAC suggested by del Valle (1998) should not exceed 25000 tm, and therefore coincides with the line of action proposed by the ICES.

between Spain and France, Spain ceded the unfished part of its quota in exchange for the guarantee of exclusivity for the purse seiner fleet on the fishing grounds during the spring months, thereby prohibiting the entry of trawler vessels for the duration of that period.

Vessels applying for access to fish anchovy or albacore must be included in the census for the national fishing-grounds and must remain on the basic lists for the type of fishing in question. Presence on the appropriate basic list is a necessary prerequisite for a fishing vessel to be included in subsequent plans for that type of fishing, in other words on the lists which are compiled periodically and which, just as the basic lists, are controlled by the European Commission. Thus, when it comes to drawing up plans for the different types of fishing practices, two distinct stages are followed: first of all the data provided by the Federations of Cofradías, Ship-owners' Associations or by individual Guilds is collected, contrasted, compared and researched prior to drawing up the basic lists. Following that, a study is made of the suitability of the vessels applying for inclusion in the periodical lists, upon the basis of available information, such as their inclusion in a specific census, technical features, regularity of fishing practice, etc.

Some ships figure on several basic lists; such is the case of those vessels which spend the spring fishing anchovy¹⁹ and the latter half of the year fishing $albacore^{20}$.

State legislation prohibits the fishing of anchovy in division VIII²¹ by Spanish vessels using pelagic trawling gear and the fishing of albacore with purse seiner gear. In addition, legislation on purse seiner fishing within Spanish fishing grounds imposes a minimum legal size on the mesh (14 mm), and the length and depth of nets (450 and 90 metres respectively) as well as minimum legal size on the species to be fished using purse seiner gear (12 cm for anchovy).Further to community and state rulings, the Fishermen's Guilds regulate the maximum catch per vessel per day and the time allowed to be spent at sea. The amount of anchovy unloaded daily at present is 10,000 kg per vessel, and ships must set out to sea after midday on Monday and make their last sale by 10 o'clock on Friday night. It might be mentioned, although this aspect will be dealt with more thoroughly in section 3, that many of the rulings made by state legislation are proclaimed at the proposal of the Fishermen's Guilds themselves.

With respect to albacore, the efforts of the Cofradías have been directed towards two different issues. On the one hand, the debate over the harm caused by the drift nets of trawling fleet, and on the other, the campaign for a label of quality to be carried by fish caught by traditional methods. With regard to this second issue, the Cofradías promoted the use of a label of quality which has started to be placed on albacore caught by traditional methods, this covers fish caught by the whole of the Cantabrian and Northeast fleets to distinguish them from what is caught with pelagic trawler gear or mid water drift nets.

It can truly be said that the Fishermen's Guilds have intervened on all the fronts to which they have had access, with a view to making their problems known

¹⁹From the approximately 275 purse seiner vessels of the Cantabrian which make up the basic lists of the last few years, a periodical list is drawn up every two weeks, although the actual number of vessels authorized to fish at any one time is 160. In order to make the most of the available licences, these are shared by two or three ships.

²⁰For this fishing there is no limit on the number of licences, hence the great number of vessels involved (around 500).

²¹See Santiago, Uriarte, Puente and Odriozola, (1996) pp 64-68.

and thereby defend the interests of the surface fleet against interference from trawlers when fishing not only anchovy but also albacore. To this end, they proposed the principle of co-existence for the different methods of fishing which was reflected in the bilateral agreements between Spain and France, accepting the principle of separation of the different methods as a lesser evil and making proposals for a reduction in the length of mid water drift nets as a step towards their total abolition which is to what the surface fleet aspires. The Fishermen's guilds have formed a strong pressure group to stand before the public authorities whenever any sector of the traditional trawling fleet has applies for permission to work the ports of the Cantabrian with pelagic trawling nets. One of their aims was to propose and pass a law to prohibit the sale of fish caught in illegal nets in clear reference to mid water drift nets and trawling nets.

3. FISHERMEN'S GUILDS: FEATURES AND FUNCTIONS THROUGHOUT HISTORY

The Cofradía is a body of members of the sector which brings together both vessel owners and workers to form a group or fellowship. Among the basic functions which this group takes upon itself, while adapting to the changes in conditions throughout in each period of history, we might mention the strict reglamentation of the productive activity designed to control not only the use of sea resources but also the management of access to such resources, as well as the sale of fish.

3.1 The Evolution of the Cofradía throughout history.

Although many began in the XIth and XIIth centuries, it was in the XVth and XVIth centuries that they became consolidated and widespread. They are a product of the Old Regime during which the organization of the produce of society was left in the hands of the craftsmen's guilds. Fishing grounds were managed as common goods, the power of the guilds in the organization of the fishing sector was virtually total and in practice they regulated all the activities related with crafts of the sea. The most important of these is the emphasis that they have placed throughout history on the regulation of catches, determining the species to be fished at each season of the year, the type of gear to be used and the measures to be taken to prevent the extinction of species. The guilds or fellowships showed quite strong welfare and religious inspiration as the latter name suggests.

Throughout the Middle Ages they formed a strongly regulated body and served as an efficient tool in the organization of the fishing sector. With the formation of the State, in the modern day sense of the word, they had already come a long way in the efficient execution of the functions for which they were created.

In the Illustration period the guilds in general, and also the Cofradías, were strongly attacked both from the idealogical and the organizational view point. They were represented as being opposed to free enterprise and, therefore, taken to be serious obstacles in the way of economic development. This was the time of the Royal Mandate of 10th July 1864 which decreed the abolishment of the seafarers' guilds or Cofradías. In spite of this they did not all meet the same end. The majority disappeared as such but kept up their activity becoming either mutual aid societies (bodies designed to provide social security and welfare for workers), "Pósitos" - Public Granaries (originally institutions set up to provide credit and agricultural supplies) while some came under the legal umbrella of articles 35 and 39 of the Civil

Code, since the change from the previous guild regulation to a different set of rules allowed them to carry out the same functions within a different legal framework. Only the Basque Cofradías maintained their legal status and continued to function as such by virtue of the fact that they belonged to a "foral" territory (one with special priveleges recognized by the State) and because of their role in the recruiting of sailors for the Royal Navy. A law passed on 22nd March 1873 abolished this special recruiting regime but did not dissolve the Basque Cofradías, although it did force them to comply with free enterprise, that is with free association, as indicated by the law.

Freedom to fish, which implied that any individual, whether or not he belonged to a Cofradía or not, could take up fishing, marked the end of the Cofradías' exclusive rights over the capture and sale of fish. This fact, together with the advent of more intensive fishing techniques, - steam trawlers - which had been rejected from the outset by the Cofradías for being less selective and more likely to cause depredation, favoured the creation and development of new subsectors in fishing (deep sea fishing) outside this institution.

The dawn of the XXth century saw on the one hand the capacity of the Cofradías to adapt to the new conditions, but was also witness to the their having to pay the price of their loss of preeminence and to the gradual invasion of their structures and functions by the State.

During the Franco regime, the Cofradías, which had been pulled apart, as has been seen, into a tangle of specific regimes, became part of the vertical trades union into which they fitted admirably, given the inter-class philosophy which inspired that institution. From the beginning of the regime the fishermen's Cofradías were given the responsability of the representation and discipline of all fishermen and they were endowed with the legal status of "Public Corporations"; although, in fact, they only embraced the inshore and surface subsectors. The Cofradías also enjoyed representation in the Spanish Parliament in the person of one procurator from the trade union. This did not prevent the Cofradías from carrying out their traditional activities as well as new ones, all in the interest of the sector, hence the mandate of 27th November 1961 which, in its 140 articles, gives a clear idea of the direction in which the Franco regime allowed the Cofradías and their Federations to act.

In the new political situation following the death of Franco, the Cofradías found their place through article 52 of the Constitution, which reserves a specific place for what is known as Corporate Administration and, therefore, for the Cofradías who gained newfound recognition and the chance to introduce their historical characteristics in the new constitutional regime.

During the transition to democracy, the switch from the structures of the Franco regime to those of the new representative regime brought about the need to renew the framework within which the Cofradías performed their functions. Both workers and employers in the fishing sector were able freely and voluntarily to join a union outside the context of the Cofradía which thereby lost the monopoly in the representation of corporate interests which it had until then enjoyed.

In addition, the regulation on Cofradías (Royal Decree 670/1978), still in force, refers to them as "organisations formed on a basis of partnership for social and welfare purposes" and, just as had happened previously during the Franco regime, confers upon them the status of Public Corporations, that is, consultory bodies in collaboration with the Government in the preparation, application and processing of rules concerning matters of general interest to the fishing sector; they perform this function in an administrative capacity, in other words, "as an administrative body

contributing information necessary to the authorities required to make informed decisions". Furthermore, article 2.1 allows the Cofradías to put forward proposals and motions without being expressly required to do so in a spontaneous fashion, although only in an informative capacity.

The political descentralization introduced in Spain involves distribution between the State and the Autonomous Communities of authority both over the Cofradías and in other matters affecting fishing (the regulation of marine fishing, shellfishing, fish-farming and the regulation on the fishing sector).

A) Cofradías

Article 15 of the Law on the Process towards Autonomy (of 14th October 1983) is key to this distribution of authority and is the only state regulation on fishermen's Cofradías with the status of Law; it confers them with a specific status, assigns them particular function and becomes the legal framework to be respected by the Autonomous Communities.

Article 15.1.c) of the above mentioned Law assigns the Cofradías and other Corporations coming under this Law with the following functions:

- To serve as a consultory body in collaboration with the Administration.

- Represent and defend joint social interests.

- Render services to their members.

- Perform genuine administrative functions to which they are entitled by their legal or administrative status.

In addition, some Statutes for Autonomy such as those of the Basque Country, Galicia and Andalusia focused expressly on the Cofradías. According to article 10.2.1 of the Basque Statute, the fishermen's Cofradías come under the exclusive domain of this Community; in spite of this, the drafting of the law by the Autonomous Community has undergone considerable delay and the Draft Bill concerning Cofradías which continues to reserve the space corresponding to them and gives them great room for manoeuvre, is at present still going through Parliament (at the amendment stage).

B) <u>The regulation of marine fishing, shellfishing, fish-farming and regulation</u> of the fishing sector.

Article 148.1.11 of the Spanish Constitution states that the Autonomous Communities may take on the responsability for fishing in territorial waters and article 149.1.19 limits authority over marine fishing exclusively to the state (except in territorial waters, as mentioned above) without prejudice to the authority of the Autonomous Community in the regulation of the fishing sector.

The regulation of marine fishing refers to the action of extracting natural fishing resources, and includes the regulation of the characteristics and conditions pertaining to this, as well as the protection, preservation and improvement of fishing reserves. Therefore, responsability for the rules governing resources, areas where fishing is allowed (depths, fishing grounds, distances, quotas), periods in which fishing is allowed (close seasons, times) and the fishing techniques and means used (type of fishing gear) lies exclusively with the State, although the content is often the result of suggestions made by the Cofradías and their Federations and are the fruit of experience.

Parallel to this, article 10.10 of the Basque Statute states that fishing in territorial waters, shell-fishing and fish-farming are the exclusive responsability of the Basque Autonomous Community. A Law was recently passed (March 1998) to regulate such activities and define acts of infringement and sanctions; while article 11.1.c) states that the authority of the Basque Community in the regulation of the

fishing sector includes the development of legislation and the enforcement of the basic State legislation within its territory (the matters which come under this heading are the distribution of fishing licences and the issue of permits for the building of fishing vessels).

3.2. Details of the management of fisheries by the Cofradías

The Cofradías have always organised their activities to adapt to the demands of each historical situation (the feudal regime, the capitalist regime, etc., including the new framework which has come about as a result of entry into the European Single Market). It can be stated without fear of contradiction that they have navigated against wind and tide, both in favourable and unfavourable circumstances.

As has been mentioned, there has been a set of rules to covere the whole range of activities throughout history (from restrictions on catches and access to the fishing grounds to all kinds of complementary activities related to fishing, use of port facilities, safety at sea or the social security on the fishermen). Rulings on the part of the Confradías have served, both before the existence of the State and also once the State had brought fishing reserves under its jurisdiction, to watch over the state of the fishing reserves and to guarantee their continuation, though not always with equal success. The Cofradías took on this responsability so early on because of the need to avoid sudden price changes which might endanger the possibility of a certain measure of stability in the fishermen's income, as well as the need to ensure food supplies. In later times, these activities were delegated to the Cofradías by the State.

The fish markets as a physical space where the fish is auctioned and also the ports came under the municipal authorities, but the enormous debts which accumulated with their construction and maintenance led gradually to the State taking over the ownership and responsability for them and for all the activities that took place therein. The Cofradías continued to receive concessions enabling them to sell fish in the port markets, as they always had. The difference between the new situation and the traditional one lies in the fact that what had always been a task proper and specific to the Cofradías became a special concession granted according to a set of bidding conditions approved by a Public Body, in this case the State Port Authority.

In recent times, EEC rule 2847/93 for the development of which the State has dictated the Royal Decree 1998/1995 contemplates (article 2) the prohibition of the unloading of fish produce outside the quays designed for this trade in each port and in article 3.1 it rules that the first sale of fresh fish produce must take place by public auction on the fish quays or in establishments authorised by the Autonomous Communities. Within this framework, the Autonomous Communities may increase the powers of the Cofradías over the sale of fish and, in fact, in the majority of cases, this is what has happened.

3.7. The role of the Cofradías in marketing

The increasing role of community law has gradually called for greater precision in the role to be played by the Cofradías. The marketing policy which has come about as a result of the Common Fishing Policy is based on the existence of the producers' organisations who are the active subjects in the planning of the fishing industry.

EEC rule nº 3687/91 from the Board Meeting of 28th December 1991 (DOCEL 354 of 23th December) defines producers' organisations as "...any

organisation or group of organisations recognised, set up on the initiative of the producers with a view to adopting the measures necessary to guarantee the rational practice of fishing and the betterment of the conditions of sale of its production". Article 5.1.

These organisations must be recognised in the first place by the State Administration and then by the EU. Non-members of the organisation are obliged to sell their products through the recognised organisation, whether it be on one part of the shore, or at one or several unloading points situated on that part of the shore. This has the effect of concentrating the supply at pre-established sales points. In the face of this challenge, the Cofradías have, at provincial level, under different names, gradually given rise to producers' organisations able to comply with these conditions (OPESCAYA, Organisation of Biscay Fish Producers and OPEGUI of Gipuzkoa).

3.3. Sanctions

The Cofradías and the Federations are also responsible for organising (eg the distribution of licences among members) the regulations adopted at European or State level for the different types of fishing. Furthermore, the general agreements adopted by the Cofradías and their Federations, especially those affecting the regulations must be accepted by members. The Cofradías are resposable for enforcing there acceptance and for reporting offenders in order that the appropriate authorities may take sanctionary measures. Sanctions may be of different degrees, from the lightest which demand the payment of fines of various amounts, according to the offence commited, to the most severe which may involve the offender's being struck off the census list for the type of fishing in which he is involved, or non-renewal the following season. As can be seen, breaking of the rules can have dire financial and social consequences for the offender.

Offences relating to the use if illegal fishing gear are usually punished with a sanction which includes the automatic confiscation of the illegal gear. Offences relating to the sale of illegal catches may involve both sides of the transaction and in relation to this it is interesting to note that the purchaser of illegal catches may be denied partial or total access to quayside auctions in the case of serious offences and the denial of credit for postponed payment in less serious cases.

3.4. The Cofradías, trawler fleets and the surface fleet

The practical consequences of joint binding decisions made by the Cofradías establish the real cultural channels along which to guide the relationship between the fishing community and the resources off which it lives and the means of production used to extract those resources. These are the decisions which, in the final instance, direct options towards one type of technology as opposed to another. In our case, in tuna and anchovy fishing, the relationship between the technology available and continuing exploitation in surface waters has been dictated by the type of gear used in surface fishing.

One of the main results of the regulatory action of the Cofradías is to determine the type of fleet which has developed over the years in surface fishing. Different variations of trawler fishing have developed free of the disciplinary action of the Cofradías, since the trawler fleet became disassociated from them.

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Important changes have also taken place in vessel construction in the surface fleet, especially with regard to navigational safety. Substantial improvements have been made in hydrodynamics and navigability, in propulsion, autonomy, transport capacity and crew comfort and hygiene. Special mention is due to the incorporation of new detection techniques in surface vessels, such as echo-sounders, sonar steering, radar, and echo-integrators. What has remained intact, however, is fishing strategy, thus, one of the common objectives throughout the last decades has been to defend that strategy in the face of competition from other ways and techniques.

The Cofradías confronted trawler fishers at the beginning of this century, opposed the capture of albacore with purse seiner gear in Bay of Biscay waters and the Cantabrian in the early 50s and have been energetic in their opposition to the use of pelagic trawler gear in recent years. These techniques were introduced without the support of the Cofradías and, as far as traditional and pelagic trawling is concerned, in the face of strong opposition on their behalf. The purse seiner tuna fishing fleet came into being as an offshoot and a prolongation of deep sea fishers, small fleets of whom, transferred their efforts to African waters, after the initial campaigns were over. That first early experience of the 50s, together with the financial advantages provided by special credit for fishermen under the development plan for the construction of vessels over 100 tm TRB, permitted the development of the tuna-freezing fleet. It must be pointed out that this fleet opted to fish with purse seiner gear, but transferred its field of action to areas outside the waters of the Cantabrian.

It must be borne in mind that the surface fleet does not require great adaptation in order to incorporate mid water drift nets for the capture of tuna and it is also worth stating that the Basque Government has carried out, at the request of the Cofradías, a thorough analysis of the technical problems and costs involved in converting the present surface vessels for pelagic trawling purposes. Conversion costs were under 20 million pesetas per unit in 1995, an affordable price for most of the fleet. At the same time, AZTI, an organisation equivalent to the Oceanographical Institute in the Basque Autonomous Community, also researched the impact that this conversion would have on stocks and on the socioeconomic situation of the fishermen. Although lacking in any definite conclusions either for or against, these studies provide some guidelines as to the advantages and disadvantages of each option.

The Cofradías and their Federations make known the problems which would affect stocks and the sustainability of fishing reserves in the not too distant future if more vessels adapted for pelagic trawling were to be introduced. It is worth analysing the issue from this point of view and in the face of the challenge of exerting this pressure on resources and running the risk of this avalanche of vessels bringing about unsustainable levels of overfishing in the future, moves are being made to prohibit the use of mid water drift nets and to restrict intensive fishing practices of a non-selective nature.

In no port and no surface vessel have moves been made towards this type of conversion. There is much debate regarding technical questions related to possible conversion, its advantages and disadvantages, but the Cofradías are united in their view with respect to the serious consequences that it would bring about.

In order to compete with these fleets of higher fishing capacity, without yielding to the temptation to convert their own fleet, thereby aggravating the problem they intend to solve, the Cofradías have turned their strategy to distinguishing tuna captured by traditional methods from that captured by the new ones, by means of a mark of quality.

Acting outside the discipline of the Cofradías, trawler owners from Cantabrian ports have purchased numerous French vessels (in many cases the French owners of these vessels were weighed down by heavy financial burdens) in order to work them from French based ports as a French-Spanish mixed enterprise. The volume of these purchases has led to the French Government to introducing specific legislation to regulate these mixed fleets. With this procedure, the Cantabrian vessel-owners elude the prohibitions of the Spanish Government restricting the use of this technique. Some traditional trawling vessels have also been converted for the use of Naveran trawling nets. These are nets which though not pelagic in the strict sense of the word, do incorporate some of its advantages. In any event, these vessels are not allowed to fish anchovy and tuna with these nets.

3.10. The Cofradías and the inshore fleet

The inshore fleet takes its catches in the so-called territorial waters which are not regulated by the European Union. These waters are to be found between the continental shelf and the bank, which in the Cantabrian is a very narrow strip. The grounds they fish are those which have been fished by traditional methods for centuries, and in fact they use different fishing techniques, the main ones being mesh nets, longline, pintxo-caña (rods with hooks), handlines and fish traps (creels). This range of techniques, competing in many cases for the same targer species, by methods which are incompatible, (hake is a typical case, being a high priced species captured by several of these techniques) taking their catches along such a narrow strip, has called for well defined rules of arbitration and an authority responsible for vigilance and enforcement of the rules. The Cofradías have played a major part throughout history in debating and developing these rules and agreements and they continue to do so at present though this is with the mediation of both regional and State fishing authorities.

The importance of the role of this institution has been seen in the surface subsector but its most noticeable presence is in the inshore subsector. In addition, the Federations of Cofradías regulate access and catches on provincial fishing grounds, while the Interfederational authority coordinates relations between the fishermen of each province and the fishing grounds shared by them.

The territorial waters come under the jurisdiction of the Autonomous Communities and it is the State which enforces regulations as to the type of fishing practice allowed and the areas where trawling is forbidden. Thus, the Ministry Ruling of 30/7/83 regulates the areas forbidden to trawlers, the Ministry Ruling of 18/1/83 regulates longline surface fishing, that of 30/6/83 regulates fishing with mid water drift nets or mesh nets, that of 30/7/83 "rasco" fishing and the Ministry Ruling 30/7/93 regulates deep water longline fishing in the Cantabrian and the Northeast. (J.I.Espel) These are laws which, on the whole, legalize the adjustments which have in fact been accepted as customary norms introduced thanks to the Cofradías.

In any case, the customary practices and most widespread fishing techniques used by the inshore fleet have traditionally been decided on by those who use them, and it is these people who, with the mediation of the Cofradías, control their use and guarantee compliance with regulations and enforcement of sanctions, following a long tradition of customary norms. Very often, these practices are not reflected in official legislation in any way. To this effect, some managers, in reference to the specific case of Basque fishermen, propose that "a solution for rescuing Basque inshore fishing from the legislative stagnation in which it is buried would be to raise the agreements of the Federations of Cofradías to the status of official regulations, subject to agreement between the State and the Autonomous Community, since inshore fishing takes place in waters under the jurisdiction of both these authorities".

4. ANCHOVY FISHERY. OPEN ACCESS?

As mentioned above, up to 1986, anchovy fishing was the almost exclusive²² domain of the Cantabrian purse seiner fleet, under the regulation of the fishermen's Cofradías. With the entry of Spain and Portugal to the European Union, the French pelagic fleet became involved in anchovy fishing with an increasing share and considerable size. It has to be taken into account that at the time of the French Revolution all guildlike organisations (similar to the Cofradía) only to be replaced by other institutions of capitalist inspiration. To this day, numerous institutions²³ exist, each of them specialized in providing the sector with a specific service.

In the bioeconomic study carried out by del Valle (1998) on anchovy fishing in the VIII Division, it is concluded that the evolution of anchovy fishing has come very close to the seasonal solutions derived from the open access model. The final diagnosis made of this type of fishing is not optimistic, in as far as the fact that evidence exists of overexploitation, overcapacity of the fleet and non-sustainability of resources.

It must be borne in mind that overexploitation of resources and overcapacity of the fleet are the result of a historic process. This process has been influenced by specific exogenous factors such as the "soft" State credits, available during the Franco regime, to build self-catering vessels, and which introduced incentives that were disruptive to the self-regulatory philosophy of the Cofradías. It is this fact that brought about the breakneck speed at which the Cantabrian purse seiner fleet developed, followed by the subsequent overgrowth of the fleet and finally by excessive pressure on stocks. During the eighties, coinciding with the first symptoms of alarm among anchovy fishers, the pelagic fleet also entered the fishing grounds, a fact which, in spite of considerable adjustments to the purse seiner fleet, brought about enormous increase in the fishing effort.

The results obtained by the above mentioned study cast doubt on present the regulation of anchovy fishing: the set of rules emanating from the European Union, the countries involved and the Cofradías have not been adequate to regulate a situation which can be described as "de facto" open access.

In actual fact, regulation through the combined methods of TACs, quotas and licences has brought to light certain features which seem odd: first, the catchers of the purse seiner fleet have generally been below the Spanish State quota, while there have been years in which French fishermen have continued fishing after surpassing their permitted quota; secondly, the present licensing system, rather than one which controls fishing efforts, is really just a simple system for the issue of fishing permits which has, in fact, placed no great barriers on the entry of vessels to the fishing grounds.

With respect to the TAC, it is worth emphasizing that, in spite of recommendations from experts, in many cases (specifically in the case of anchovy) it

²²France has always had a small purse seiner fleet.

²³Among others, Cooperatives (who organize activity in the port and quayside markets), Local Marine Fishing Committees (these aim to link the interests of fishermen in general with those of the locals and apply economic and technical data at local level). Interprofessional Associations, Unions, etc.

comes to be little more than the result of mere political negotiations²⁴. The 33,000 tm TAC established for anchovy is not the result of a bioeconomic study, but corresponds to past average catches of the 70s. This in turn brings attention to the unwonted transfer of 6,000 tm of the Portuguese anchovy quota in the IX Division, which implies surpassing the pre-established TAC and transferring potential catches from one stock to another, with no pronouncement on the part of community authorities.

The possibility of redistributing uncaptured quotas of various species among the countries of the Union, leads to a practice allowed by community authorities, which consists of renegotiating surplus quotas with a view to improving one's initial assignation. Thus, for example, in 1994 Spain gave up 6,400 tm of anchovy to France and France gave in exchange 500 tm of anglerfish, 720 tm of hake and 50 tm of whiting. Although the renegotiation system should, at least in theory, lead to an improvement in the situation for all involved, in practice it leads to one of perverse logic, in so far as pressures and third party interests, from other fleets and other fishing techniques, result in the anchovy TAC not being revised, all this to the detriment of any sensible fishing regulation and, in the final instance, of the actual profitability of the purse seiner fleet.

The policy of issuing licences, on the other hand, has neither proved to be a system which has, in practice, succeeded in limiting access of new vessels to the anchovy fishing grounds; proof of this lies in the fact that 150 vessels were incorporated during the most critical campaigns. It must be stated that at the demand of the Planes de Orientación Plurianual (POP) - plurianual guidance plans - attached to the Política de Estructuras Pesqueras (policy for the structuring of fisheries), the purse seiner fleet has been gradually reduced over the last ten years, while in the same period the French fleet has failed to comply with the plans for restructuring as demanded by the POP.

At another level, the self-imposed restrictions of the Cofradías (maximum amount to be unloaded per vessel per day, working calendar, length of stay at sea, etc) also fail to prevent excessive pressure on stocks and overcapacity of the fleet. Nevertheless, it must be taken into account that the restrictions established by the Cofradías affect only the Cantabrian purse seiner fleet, so that their self-imposed discipline does not bind the rest of the participants on the fishing ground.

These restrictions, therefore, do not constitute any form of insurance against overfishing. Efforts made towards keeping a less intensive fleet, by prohibiting the Cantabrian vessels to use techniques which would increase their catch, are proving insufficient to guarantee the control of overfishinf and excess capacity. Lack of incentives for effective cooperation among agents is bringing about a situation in which different rules and strategies overlap, thereby neutralizing the chances of success through regulation.

Self-organisation, however, is not any guarantee per se of adequate management of resources and does not always achieve replacement of stocks and the upkeep of economic revenues. In many instances of common pool resource management, self-organizational methods have been insufficient to prevent resources from irreversible depletion. This situation is not unknown in the management of resources by Cofradías, since, in certain periods of history in which the Cofradías have had full power in fishing regulation, they have failed in the attempt. It must not

²⁴The TAC proposal resulting from the work of del Valle (1998) ranges between 17,000 and 25,000 tm, noticeably lower than the present figure of 33,000 tm (without scientific endorsement since 1992)

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be forgotten that some species, well-known in the waters of the Cantabrian in former times (whales and others), have disappeared as a result of excessive pressure on stock..

Althought anchovy fishing, for reasons already explained, is no example of proper exploitation, this does not entitle us to question the undeniable role they have played in self-discipline, since they have in general succeeded in imposing sustainable regulations in the majority of the fishing grounds in which they have intervened from time immemorial.

It is essential that all the fleets involved accept a philosophy of sustainability in the long term, they must make a break with the short-sighted conduct at present so prevalent in the pelagic trawler fleet. There is little use in some agents' adopting selfimposed restrictions, while others pursue maximum short-term profit, thereby mortgaging the long-term benefits for all concerned. To avoid the harmful consequences of the equilibrium associated with the prisoner dilemma in which everyone is a loser, common discipline must be accepted by all involved, along with rules of play designed to avoid the vicious circle of non-cooperation.

The role of the European Union is paramount in overcoming lack of cooperation regarding allocations. European legislation ought to guarantee fullfilment of the present rulings by means of solid control and sanctioning mechanisms and encourage in the future a dynamic to make the self-restriction of the Cofradías compatible with a discipline of new incentives and restrictions designed to overcome such short-sightedness. A feasible and interesting way to achieve this aim would be to revise methods for establishing the TAC, the distribution of quotas and licences in order to make adjustments to the real situation of the stock.

5. CONCLUSIONS

Empiric evidence shows that many groups of individuals have, for long periods of time entrusted the management of resources to bodies distinct from the State and the market, it is, therefore, a mistake to associate the management of common pool resources with inefficiency.

In this paper the case of the Cofradías of Fishermen in the Basque Country has been analysed as that of an institution which has in the past managed common pool fishing resources, although at present we cannot speak of common pool management in its strictest sense, partly because of increasing outside interference.

Taking anchovy and albacore fishing as a reference, (since these are the two main target species), the rules for the self-organisation of the Cofradía refer mainly to the maximum amount to be unloaded per vessel per day, the fishing calendar and length of stay at sea. Special mention is due to the restriction imposed on the use of intensive practices such as pelagic trawling gear or mesh drift nets and, by extension, on the type of fleet accepted to work these fishing grounds.

In spite of all the restrictions established on anchovy fishing at various levels, the present situation shows signs of overexploitation, overcapacity of the fleet and non-sustainability of resources, because of which the value of present fishing regulations is questioned.

The relative failure of the Cofradías in the realms of anchovy fishing leads us to accept that the self-organizational management method is not in itself sufficient guarantee for sustainable management. In spite of this, it must be admitted that the Cofradías are a potentially potent instrument of great use in applying regulations. In this particular case of the Cofradías of the Basque Country, they are the instrument which has enabled the rational exploitation of fisheries, with the exception of some specific species.

In order to break away from the short-sighted conduct - resulting from prisoner dilemma type logic - which can be observed at present, it is essential that all the fleets on the fishing grounds accept a philosophy of long-term sustainability. There is no use in some agents practising self-restriction if the rest mainly persue maximum short-term profit, thereby mortagaging the future benefit of all concerned.

The European Union must take on an active role in overcoming lack of cooperation, by guaranteeing the fullfilment of regulations and encouraging a dynamic to make the self-restrictions of the Cofradías compatible with a discipline of new incentives and restrictions designed to overcome short-sighted conduct.

5. BIBLIOGRAFY

ASTORKIZA, DEL VALLE, Y ASTORKIZA. (1997). La flota del Cantábrico en la pesquería del atún blanco del Atlántico Norte. Papeles de Economía Española, 71(1997). Págs 252-263.

CIRIACY-WANTRUP Y BISHOP, 1975. Common property as a concept in natural resources policy. Natural resources Journal, No. 15, pp, 713-727.

DEL VALLE, (1998). Análisis bioeconómico de la pesquería de la anchoa de la División VIII. Tesis Doctoral.

FEENY, HANNA, and McEVOY, 1996. *Questioning the assumptions of the Tragedy of the commons model of fisheries*. Land Economics. 72(2):187-205.

HANNESSON, 1991. From common fish to rights based fishing. European Economic Review. (397-407).

OSTROM, 1990. Governing the Commons: The Evolution of Institutions for Collective Action. New York: Cambridge University Press.

REBOLLO, FALCON Y LOPEZ, 1996. Naturaleza y régimen jurídico de las Cofradías de Pescadores. Servicio de Publicaciones. Universidad de Córdoba.

SANTIAGO, URIARTE, PUENTE y OLAIZOLA, 1996. *Efectos de la introducción del arrastre por la flota vasca de bajura en las pesquerías de anchoa y atún blanco*. Informes Técnicos nº 73. Gobierno Vasco.

SCHLAGER, BLOMQUIST and TANG, 1994. *Mobile flows, storage, and self organized institutions for governing commom-pool resources*. Land Economics, 70(3): 294-317.

SCHLAGER and OSTROM, 1992. Property-rigths regimes and natural resources: A conceptual analysis.. Land Economics 68(3): 251-262.

STEVENSON, 1991. Common property economics. A general theory and land use applications. Cambridge, Cambridge University Press.

VALDES, 1988. La flota pesquera española. Capítulo 1: La flota de cerco de pescado fresco. Mundi Prensa Libros.