

# Maritime societies, fisheries law and institutions in the western Mediterranean

A summary of collective rights and decentralized systems of professional discipline

FAO  
FISHERIES  
TECHNICAL  
PAPER

420



# Maritime societies, fisheries law and institutions in the western Mediterranean

A summary of collective rights and decentralized systems of professional discipline

by  
**F. Féral**  
Professor of Law  
University of Perpignan  
France

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

ISBN 92-5-104696-4

All rights reserved. Reproduction and dissemination of material in this information product for educational or other non-commercial purposes are authorized without any prior written permission from the copyright holders provided the source is fully acknowledged. Reproduction of material in this information product for resale or other commercial purposes is prohibited without written permission of the copyright holders. Applications for such permission should be addressed to:

Chief

Publishing Management Service

Information Division

FAO

Viale delle Terme di Caracalla, 00100 Rome, Italy

or by e-mail to:

[copyright@fao.org](mailto:copyright@fao.org)

© FAO 2004

## PREPARATION OF THIS DOCUMENT

The Promotion of Coastal Fisheries Management technical programme (234A4) of FAO Fisheries Department was established to help identify management instruments adapted to coastal fisheries, which are conducted mainly by small-scale fishers. Very often these activities are characterized by close intercommunity links and traditional management practices of proven efficiency, among others, but also by an insecure legal context, in which policy guidelines often put priority on the development of industrial fisheries. It was thus considered appropriate that the initial phase of the programme should concentrate on comanagement mechanisms, including approaches based on user rights and methods for controlling fishing capacity.

Since time immemorial, the Mediterranean has amassed a wealth of experience in the area of management based on collective rights and decentralized systems of professional discipline. The development of these systems and the public policies behind them are areas of interest to the General Fisheries Commission for the Mediterranean (GFCM). At its third session in Madrid from 2 to 5 May 2000, the GFCM Scientific Advisory Committee (SAC) requested its Subcommittee on Economics and Social Sciences (SCESS) to undertake a series of studies on the social, institutional and legal aspects of management, and particularly comanagement, mechanisms.

It was against this background that the FAO Fisheries Department's Fishery Policy and Planning Division (FIP), in partnership with the University of Perpignan, France, through FAO's Visiting Experts Programme, undertook this study, which was conducted between mid-July 2000 and mid-January 2001. The study is based on a review of many different sociological and ethnographic research works on Mediterranean maritime societies, an analysis of legal texts, and field observations in most of the countries of the subregion.

It is hoped that this introductory paper on maritime societies, fisheries law and institutions in the western Mediterranean will be of interest to fisheries management in other regions of the world, and even perhaps provide them with some useful lessons.

Distribution  
FAO Fisheries Department  
FAO Regional Fishery Officers  
Directors of Fisheries  
Selected institutes and projects  
Regional and international fisheries organizations

Féral, F.

Maritime societies, fisheries law and institutions in the western Mediterranean. A summary of collective rights and decentralized systems of professional discipline. *FAO Fisheries Technical Paper*. No. 420. Rome, FAO. 2004. 54p.

## ABSTRACT

**T**his publication considers fisheries management policies in the Mediterranean in the light of the new objectives of sustainability and governance. Emphasis is put on the decentralization of public action and the reform of institutional mechanisms.

The first chapter assesses the historical and societal bases of the dualism of small-scale fisheries and industrial fisheries. The dialectical relationship of power between these socio-economic categories is a result of arbitration by the public authorities that have entered into a spiral of interventionism. This has overturned the decentralized secular models of organization and regulation of fishing communities.

The similarity of the legal frameworks governing access to fisheries, the statutes of the profession and the areas of intervention by the administration are considered in Chapter II.

Chapter III looks at the institutional convergences between the countries of the region. The author identifies excessive administration and an ambivalence in the role of the professional organizations.

The author also underlines the various initiatives aimed at rebuilding the communities' principles of self-regulation, and questions the policy-makers' capacity to commit themselves to policies of territorial allocation, as well as the communities' capacity to fulfil a regulatory function enforceable in the industrial sector. Legal validation of the communities and their traditional rules of management over territories to be allocated would be a priority.

# CONTENTS

<b>INTRODUCTION</b>	<b>1</b>
<b>CHAPTER I THE DUALITY OF FISHERS' SOCIETIES</b>	<b>3</b>
<b>SECTION 1. THE ORGANIZATION OF COMMUNITY FISHERIES</b>	<b>3</b>
1.1 A phenomenon of historic and socio-economic civilization	3
1.2 The communitarization of a territory	4
1.2.1 Communitarization by spatial demarcation of a territory	4
1.2.2 Communitarization of territory by traditional knowledge	5
1.3 The communitarization of fishing	5
1.3.1 The transmission of traditional professional knowledge	5
1.3.2 The establishment of professional discipline	6
1.4 The community: the basis of the artisanal model of small-scale fisheries in the Mediterranean	7
<b>SECTION 2. THE ORGANIZATION OF SEMI-INDUSTRIAL FISHERIES</b>	<b>8</b>
2.1 The societal definition of semi-industrial fisheries	8
2.2 The decommunitarization of semi-industrial fisheries	9
2.2.1 The deterritorialization of the working area	9
2.2.2 The individualization of fishing and the mediatization of maritime knowledge	10
2.2.3 The absence of professional discipline	10
2.3 Semi-industrial fishing and state regulation of the fisheries sector	11
2.3.1 The political context of the industrialization of the fishing sector	11
2.3.2 The establishment of the administrative apparatus for industrialization	11
2.3.3 The Mediterranean semi-industrial model	12
<b>SECTION 3. THE DIALECTICAL RELATIONSHIP BETWEEN THE TWO TYPES OF FISHERIES</b>	<b>13</b>
3.1 The confrontation of two fisheries logic	14
3.1.1 The unenforceability of community rights and the confiscation of the resource and the market	14
3.1.2 The destabilization of community discipline	15
3.2 A sociocultural interpretation of the two maritime societies	15
3.2.1 Limited demographic links	15
3.2.2 The convergence of maritime cultures	16
3.2.3 The establishment of traditional knowledge in the industrial sector	17
<b>CHAPTER II AN ANALYSIS OF THE LEGAL FRAMEWORK FOR FISHERIES</b>	<b>19</b>
<b>SECTION 4. THE AMBIVALENCE OF THE PRINCIPLE OF MARE LIBERUM</b>	<b>19</b>
4.1 The content of the principle of mare liberum	19
4.1.1 Origins of the principle	19
4.1.2 The exclusive competences of coastal states over fishing rights	20
4.2 The consequences of the application of the principle of mare liberum	20
4.2.1 The unenforceability of prior rights of fishers' communities	21
4.2.2 The principle of freedom applied for the benefit of semi-industrial fisheries	21

4.3 Territorial concessions allocated under the principle of mare liberum	22
4.3.1 The allocation by the state of access rights and occupancy	22
4.3.2 The communitarian interpretation of state authorization	23
<b>SECTION 5. THE ACQUISITIVE EFFECTS OF PROFESSIONAL MARITIME LAW</b>	<b>23</b>
5.1 The appropriation of resources on the basis of professional status	24
5.1.1 The establishment of a profession regulated by professional status	24
5.1.2 The establishment of access privileges through the allocation of fishing licences	24
5.2 The legal ambiguity of the professional categories	25
5.2.1 The distinction between shipowner and fisher	25
5.2.2 The difficult legal distinction between small-scale and industrial fisheries	26
5.2.3 The distinction between professional and leisure fishers	26
<b>SECTION 6. ADMINISTRATIVE INTERVENTION IN THE LEGAL ENVIRONMENT</b>	<b>27</b>
6.1 The problematic incorporation of administrative interventions in sustainability policies	27
6.2 The administrative tasks involved in implementing fisheries policies	28
6.2.1 Defining national policy	28
6.2.2 Gathering information	29
6.2.3 Producing policing standards and economic interventions	29
<b>CHAPTER III THE ADMINISTRATIVE AND PROFESSIONAL INSTITUTIONS OF MARITIME FISHERIES</b>	<b>33</b>
<b>SECTION 7. THE IMPORTANCE OF THE STATE ADMINISTRATION</b>	<b>33</b>
7.1 The international fisheries administration	34
7.2 The similarity among the different national administrative apparatuses	35
7.2.1 Central departments responsible for marine fisheries	35
7.2.2 The scientific fisheries administration	36
7.3 The complex nature and abundance of the deconcentrated administration	36
7.3.1 The deconcentrated territorial fisheries administration	37
7.3.2 The deconcentrated specialized fisheries administration	37
<b>SECTION 8. THE AMBIVALENCE OF THE PROFESSIONAL INSTITUTIONS</b>	<b>38</b>
8.1 The place of professional institutions in fisheries policies	38
8.1.1 The professional institutionalization of the marine fisheries sector	38
8.1.2 How can the professional institutions be analysed?	39
8.2 The functions of the professional institutions	40
8.2.1 The function of representation	40
8.2.2 The function of negotiation and comanagement	42
8.2.3 The function of professional discipline	42
8.2.4 The function of collective service provision	44
8.3 The lessons of the institutional analysis	45
8.3.1 The ambivalence of the institutions: territorial organizations or networks	45
8.3.2 The role of the state in recognizing the professional institutions	46
<b>CONCLUSIONS AND PROSPECTS</b>	<b>47</b>
<b>BIBLIOGRAPHY</b>	<b>49</b>

## ACKNOWLEDGEMENTS

The author would like to thank the staff of FAO and the many people he met during field trips who took the time and effort to contribute to the discussions raised by the issues in this publication. He would particularly like to thank Alain Bonzon, in charge of Programme 234A4, and Dominique Gréboval, Serge Garcia, Ulf Wijkström and Habib Ben Alaya of the FAO Fisheries Department, as well as Annick Van Houtte of FAO's Legal Office, for their invaluable advice and comments during the drafting of this paper.



# FOREWORD

For more than 20 years, the manner of leading development with respect to society has been a focus of concern in state interventions. Development organizations that represent states are thus also called upon to reflect on their methods of intervention, and are taking an increasing interest in the social sciences. However, the social sciences cannot be applied in the area of development simply by adopting the mechanical approach which was for a long time the strength of the “serious” sciences. There is a specific methodology used for sociology, political science, political economy, history, human geography and law, and it often produces ambiguous results, swathed in doubt and assailed by questions. Hence, hard scientific methods cannot be used with the social sciences; the observation of phenomena cannot be documented in the same way every time. The materials under observation are heterogeneous, the sources uncertain and the analyses and conclusions often intuitive.<sup>1</sup>

This provides a very general background to the request made by the FAO Fisheries Department to the University of Perpignan<sup>2</sup> in France. The university’s multidisciplinary experience in the Mediterranean was a scientific opportunity to produce “a summary of collective rights and decentralized systems of professional discipline” in maritime fisheries. However, an analysis of this institutional and legal topic within a sector in crisis, in a particularly complex area, could only be of interest if consideration were also given to the issues of governance and fisheries administration in the light of the objectives of sustainability.

The issue of the organization of maritime societies in the Mediterranean does indeed raise the question of decentralization of public actions; it also questions the fisheries resources management systems used today by the various governments in this geographic basin. The publication of FAO’s *Code of Conduct for Responsible Fisheries* further increased the FAO Fisheries Department’s openness to public policy analysis. The Code consists of a series of recommendations, and the problem of their applicability cannot be evaded. Hence, in considering the applicability of the Code, we also raise the issue of public administration and intervention by the states responsible for the management of the fisheries that fall within their jurisdiction.

This study has been conducted at a time when public fisheries policies are being called into question, particularly in the Mediterranean, and there is much perplexity over the implementation of internationally recommended management models. We hope that the publication will provoke discussion on management issues that are also of concern to other fisheries regions in the world with similar fisheries structures.

After the Second World War, scientific and centralized state policies encouraged and built up industrial fisheries. Can it be said today that this interventionism was “too successful”? There is now a semi-industrial fleet in the Mediterranean, but it is in

---

<sup>1</sup> It is, however, also true that the hard sciences have gradually moved away from the certainties on which they relied in previous decades. Hence, the inclusion of doubt in the area of environment and food security has introduced a precautionary approach in the process of policy-making.

<sup>2</sup> Over the last ten years, the University of Perpignan has been working on the history of institutions, law and public policy in developing countries in two political and legal science laboratories (Centre for Study and Legal Research on French-speaking Areas of the Mediterranean and Africa, and the Policy Analysis Centre). Work has been conducted on the environment and fisheries policies in particular. However, the university is also multidisciplinary, and its biology and marine geology laboratories have been working in the Mediterranean for many years, e.g. the Banyuls Marine Biology Laboratory, the Marine Environment Training and Research Centre, the School of Higher Studies Marine Biology and Malacology Laboratory, the Tropical and Mediterranean Biology and Ecology Centre.

crisis throughout: the general crisis in fisheries resources; the crisis in the market for many fisheries products through the competition linked to globalization; the crisis in fisheries companies facing debts and increased production costs; and the social crisis in maritime societies that has translated into a demographic crisis, with almost universal impoverishment of fisher populations. And as regards the “small coastal fisheries” that exist almost everywhere in the Mediterranean, they are still obscure and marginalized – as such, they are also in crisis, but in different ways.

It now seems that those in charge of the sector want to turn a new page in fisheries policies and talk of “sustainable and responsible fisheries”. Yet how can this new model be established? What does it mean, in terms of actual fishing? And especially, what must the state administrations do just a few decades after they have opened up a Pandora’s box of industrialization in Mediterranean fisheries through subsidies and technology transfer? What decisions can be taken, with a maritime population so undisciplined and stressed by the erosion of their income? How can fisheries resources be protected from an often oversized production tool? How can the pace of fisheries be regulated according to objective scientific data and qualitative information?

These questions all challenge the systems that today form public fisheries policies.

The first line in this system, interacting with civil society, is the fisheries administration in the Mediterranean. And what do we actually know about this administration? Have its interventions ever been assessed? Do we have any administrative science studies of its history, the means available to it, the way it thinks, its objectives, methods, the way it is represented, or its efficiency? Should it be challenged today to achieve new objectives?

Opposite the administration, which to a certain extent decides its fate, is civil society and the numerous interests of its different categories. In the first line here are the maritime societies that derive their living from the sea and exploit its wealth. What do we know about the men and women who live from fisheries in the Mediterranean today? Can we find the foundations of the new management systems in these people? Is the environment homogenous and monolithic? Or is it split by internal conflicts? Does it follow any identifiable logic?

This study does not attempt to answer all these questions for it would be difficult at this time to bring together the data needed to do so. It may be seen as an “epistemological offering” whereby it will consider the problems facing fisheries through the relationships between maritime society and the administration. The process does not need to be exact, nor even scientifically verifiable. Its aim is to amalgamate a profusion of heterogeneous information according to a series of topics, and thus to increase our knowledge.

This knowledge has no other function than to contribute to the better definition of public fisheries policies in terms of sustainability and responsibility.

**François Féral**

# Introduction

For the social sciences, the history and characteristics of maritime societies are the first point from which to view fisheries policies. This is the fundamental difference between social science and the bioeconomic approach used by marine fisheries administrations over the last 50 years. These social realities are the “weighty” component of the fisheries issue, even though they may not appear clearly in the interventionist strategies of public authorities.

The other area from which to approach fisheries policies is the legal and institutional organization of the sector. This can be analysed from the viewpoint of administrative science, in which the social, historical and political dimensions of administration are included in the analysis of its legal forms.

The study of maritime societies and their administration is thus at the heart of our scientific approach, but we do not have data equivalent to those examined by fisheries biologists and economists; moreover, the inherited methodology for this approach is both limited and uncertain. Hence, the developments proposed in our work are not based on systematic data and homogenous information for each country concerned. The sources are a range of different types of documents – a heterogeneous series of testimonies, interviews and field observations and, finally, legal analyses of the legislation and doctrines of most of the countries of the western Mediterranean.

This, then, only goes to underline the chasm of ignorance in which we find ourselves, particularly with respect to the maritime societies of the Maghreb and the eastern Mediterranean.<sup>1</sup> These inadequacies call for comments on the methods used. With respect to the documentation:

- it is the fate of the social sciences to work with heterogeneous materials, and to compare different types of data in order to feed hypotheses;<sup>2</sup>
- the huge amount of bibliographic data gathered, based on empirical knowledge of marine fisheries, particularly in the Mediterranean region, would seem sufficiently credible for the working hypotheses to be examined with indulgence.

And with respect to the issue:

- the aim of comparative social science studies is, in particular, to try to establish links between countries with very different histories and situations, which inevitably involves risks. However, in this context, even a false hypothesis can be productive;
- the institutional analysis in this work is based on fairly complete documentation for the countries most commonly quoted, which should be adequate to give credibility to most of the legal analyses.

From observations of the fisheries of the western Mediterranean and their recent history, the hypothesis is that there are two societies of fishers existing everywhere although there are, of course, huge national differences. Although these two societies are not in complete opposition, there are fundamental socio-economic differences between them. This observation would be of little importance other than scientific and aesthetic if the many points of difference did not have an effect on fisheries management. With

---

<sup>1</sup> The Mediterranean is here taken to mean basically the northern and southwestern Mediterranean, with little information given on the eastern Mediterranean.

<sup>2</sup> The historic approach of the *Annales*, in particular, introduced this methodological approach, using all the materials available and focusing them on one issue; there is no question that huge progress in knowledge generated was achieved by this movement, illustrated by Block and Braudel.

their technical and bioeconomic approach, the marine fisheries policies of the last 50 years have scarcely taken this dualism into account.

Could this eclipsing of a fundamental sociocultural reality of maritime society explain the crisis in the sector and the problems it has had in developing a strategy for sustainability and responsibility? The existence of these two types of marine fisheries means that there are two different social and economic realities. How can these two societies be better identified? What are the socio-economic links that separate them or bring them closer together? What institutional relations exist between these two social groups and other actors in the sector, particularly the public administrations?

These are some of the questions raised in an attempt to shed light on the issue. This publication will be divided into three chapters, based on the observation of the existence of these two maritime societies in the Mediterranean. The overall objective is to underline the socio-economic, legal and institutional interactions that link or separate them.

The first chapter will attempt to identify the characteristics of these societies, the second will analyse the legal environment, and the third and last chapter will examine their institutional aspects.

# The duality of fishers' societies

Observation of various marine fisheries in the Mediterranean shows that there are two types with completely different socio-economic organizations, headed by two different social groups. These two fisheries types are:

- *community fisheries*, which represent the original tradition of Mediterranean marine fisheries; and
- *semi-industrial fisheries*, which have appeared relatively recently, although there are some important historical precedents.

While it is easy to make an intuitive distinction between these two categories, it is rather more difficult to set their boundaries and define them precisely. Yet such a definition, however general, must be made if we are to describe their societal strategies for sustainable and responsible management. Fishers' groups are the main actors in this management, as well as in their own internal dynamics. Moreover, the latter are not merely a collection of individual strategies, as is generally inferred from superficial analyses.

## SECTION 1. THE ORGANIZATION OF COMMUNITY FISHERIES

Fishing communities are an important historical and socio-economic phenomenon in the Mediterranean, a fact of civilization. The mechanisms of this phenomenon appear with the communitarization of territories and fisheries exploitation. Such sociogeographic communitarization forms the basis of the small-scale type of fisheries in the Mediterranean.

### 1.1 A phenomenon of historic and socio-economic civilization

Communities of fishers have existed throughout the Mediterranean basin since time immemorial. There is abundant mention of this phenomenon of civilization in historic, geographic and ethnographic literature. Some also speak of “indigenous fisheries” or “sedentary fisheries”, designating groups firmly linked to what can truly be termed “fishing grounds”.

These communities are first of all a permanent historic and sociological fact, noted in many publications.<sup>3</sup> Exploring the Mediterranean in both space and time, this consistency is striking – fishing communities have existed almost everywhere for centuries, grouped together in “marine burghs”.<sup>4</sup>

The term designates the dense settlements of fisher families and their professional location, which can be found in diverse forms throughout the Mediterranean. These may be hamlets of tents for nomads with but a few families (as in Morocco), or a few cane huts (as in Catalonia or Languedoc). Yet gradual sedentarization has created villages, and colonized certain districts of towns and ports, which now have several hundred inhabitants; the hamlets and tent villages (*douars*) dotted along the coast of the Mediterranean form a string of fishers' settlements. In addition to providing domestic housing for families, such areas also include technical zones for the protection

<sup>3</sup> cf. for example, Berthelot (1868); Berthoule (1890); Borrel (1956); Bourges (1908); Braudel (1985); Lacoste (1911); Laoust (1923); Louis (1952); Mollat (1987); Sébillot (1901); and Thomazi (1950). See also the bibliographies of Zouggar and Lopez Garcia (1999) and the Tunis *cahiers de l'IFBLA*.

<sup>4</sup> cf. Collet for this original term.

and landing of vessels, the construction and repair of boats, the storing of nets, their maintenance and repair, and the sale, storage and packaging of the catch.

*Some communities are analysed as models of the “coastal colonization”<sup>5</sup> that grew up after long periods of war and piracy. In different ways, initially isolated families, and then groups of families or tribes settled along the seashore or lakeshores, using uncultivated areas of the coast. The sedentarization of these groups was gradual; at first, housing was temporary and income often came from farming as well as from fisheries.<sup>6</sup> Thus new groups of people settled along the coast, but not mixing with the local peasant population, even though their distant origins were the same. This colonization generally developed into the founding of the fishing ports and villages of the Mediterranean.*

The colonization of uninhabited areas of the coast, which increased in the nineteenth century, is a model of *rural communitarianism*; in the urban areas, too, in the trading or military ports, there were places where fisher families would gather: fishers’ districts and port zones for landing and for selling the catch. This is the communitarian model encysted in urban areas, of which it may have been the distant origin.<sup>7</sup>

However, this fishing colonization movement along the Mediterranean coast no longer occurs. What is left now is the remainder of these communities, and it is often said that the community phenomenon in fisheries is undergoing a severe crisis. The communities seem to be disappearing; their vitality would seem to be inversely proportional to the growth in urbanization and the transformation of the coast by tourism. However, in both demographic and economic terms, community fisheries are still a major socio-economic phenomenon in marine fisheries.<sup>8</sup>

## 1.2 The communitarization of a territory

The marine burgh is always linked to a territory where fisheries operations are conducted. The term “community fishing territory” can therefore be used.

### 1.2.1 Communitarization by spatial demarcation of a territory

The size of the community territory is clearly related to the nature of the fishing activities. The capacity of the craft and the techniques used, the characteristics of the coast, and the diversity of sites and fisheries resources are all determining factors. The territories may also merge with administrative areas, but rarely have a radius of more than 10 km around the marine burgh; the state maritime station and local council are thus the areas of reference for the community group which can, in fact, win administrative recognition.<sup>9</sup>

<sup>5</sup> cf. for this term, Doumenge (1951), on the nineteenth century colonization of the Lower Languedoc coast in France.

<sup>6</sup> A phenomenon found in the Moroccan Rif, with the appearance of very isolated groups of fishers’ dwellings, some of which are still almost inaccessible today.

<sup>7</sup> In Messina, for example, there are several fishers’ districts situated around the port and transport activities; in Casablanca, the main fishing port is situated inside the trading port, but fishers’ hamlets can be found all round the edge of the town; in Marseilles, the fishers’ living areas are situated around the old port, in the *calanques* and at Lestaque; in Barcelona, the Barceloneta district is another illustration of this insertion of living areas; in Sfax, on the other hand, a large fishing port dominates all port activity.

<sup>8</sup> In Italy, the large numbers of small craft bear witness to the continued vitality of the fishing communities: 19 000 craft in 2000. In the Moroccan part of the Mediterranean, there are 90 landing points, including five main fishing ports, with 2 700 small-scale fishing craft; this activity provides employment for 8 500 fishers, both crew and skippers (Malouli, 2000). In the Gulf of Lion in France, a recent study showed 45 landing sites, not including the lagoon villages (Guillou and Crespi, 1999). In residential areas, tourist accommodation has mostly colonized former fishing villages, some of these very large, as in the case of Collioure in France.

<sup>9</sup> cf. in France the historic cases of Collioure, Palavas and Le Grau du Roi. In Morocco today, even the uncertain legal institution of “fishers’ villages” represents sedentarization of the group. However, the number of fishers also depends on the proximity of the port town, which provides the outlet for their products – it is not related to the wealth immediately available around the large coastal towns.

However, the territory can also be defined on the basis of markets and eating habits, which means that certain species and sites are either overexploited or ignored by the community. Hence, psychosociological elements, such as memory, tradition, taboos and religious considerations can also restrict or demarcate existing territories, introducing the idea of community joint use. The territory may thus insinuate into (or clash with) the territories of other communities, and all these community territories constitute a mosaic of collective rights and mutual recognition, to which we shall return later.

The demarcation of community territory is hence in no way an objective, legal or bioeconomic definition; it is a historical fact determined by a mass of geographic and historical data, from which we unfortunately have only fragmented information.

### *1.2.2 Communitarization of territory by traditional knowledge*

Traditional knowledge is taken to be the knowledge, which may be more or less systematized, acquired by a community from its historical experience. However, while the transmission of this knowledge may be traditional, its content and origins are composite, relayed as often by migration, travel, conflict and colonization, as by collective memory.<sup>10</sup>

This knowledge involves the identification of a space in which to operate: benthic and pelagic routes and sites identified by names, points of reference, resources, seasons and rates of exploitation. The degree of precision in this identification of the community space is one of the elements of personalization of the group. As a group, it has the best knowledge of "its" surrounding space, in concentric circles. The community thus exercises a "control of knowledge" over the territory, based on its thorough knowledge, its residence and its collective memory.

Traditional knowledge also includes knowledge of fish species, their behaviour and their environment. This relates to a complex series of empirical observations and their transmission to members of the community. However, representations from mythology and imagination also form part of this knowledge, which may be rooted in the more distant past.<sup>11</sup>

Community knowledge also extends to meteors, which are related to navigation and a fishing calendar familiar to all fishers. The importance of bad weather is fundamental to an occupation that depends for its fortune on the sea and its harvest.

## **1.3 The communitarization of fishing**

In the territory thus identified, the community is constituted by the transmission of professional knowledge and the control of fisheries operations.

### *1.3.1 The transmission of traditional professional knowledge*

The role of the fishing communities is essential. The training of fishers is the community's most important, broad and varied function: fisheries demand a high level of training and a long apprenticeship.

The territorial knowledge mentioned above forms the initial elements of professional training but is not enough for thorough training. Such knowledge covers navigation techniques, the construction and maintenance of craft, and the rigging and superstructure of boats. It also deals with the assembly, rigging, repair and maintenance of fishing equipment and encompasses the skills needed to mount and lift the gear, to unmesh the different species, and to package and store them.

<sup>10</sup> In Nador, in Al Hoceima and in the Beni Boufrah valley in Morocco, which leads to Torres, knowledge has been acquired from contact with Spanish fishers. At Cherchell in Algeria, fisheries knowledge came from Italian emigrants from Gaeta; in the Gulf of Gabès through contact with Sicilians; in Messina, the method of fishing for swordfish came from the Phoenicians; in Palavas in Languedoc, the group fishing technique for tuna was brought by fishers from Carro at the end of the nineteenth century; in Sète, the fishing tradition initially came from Martigues in the sixteenth century, and then from Gaeta in the nineteenth century.

<sup>11</sup> cf. Collet on swordfish in the Messina straits.

However, it is not the extent of this knowledge that best characterizes the communitarization of exploitation, but rather the traditional mode of its transmission. Individual fishing practices conform to and reproduce a production model<sup>12</sup> that is transmitted almost exclusively by the group. Its domination and authority are based on the family, lineage, sibling relationships and solidarity between generations. These different groups impose on the individual the socioprofessional cosmogony of the community.

Within the community, the transmission of knowledge is reserved for the group made up of families, clans and their allies. It passes from the “elders” to the “youth”, from parent to child. The children thus depend, for their inclusion and survival, on the professional inheritance provided by the community in an intergenerational system. This discriminatory transmission is therefore both a privilege and a way of restricting access to the community by limiting the number of people authorized to engage in fisheries within the territory. Hence the transmission of knowledge is a way of controlling professional demography.

### 1.3.2 *The establishment of professional discipline*

For the community, fisheries are a “zero-sum game”, where total wealth scarcely increases at all, and sharing is of greater importance than individual efficiency. The role of the community is thus to lay down the principles for sharing a resource where the main factor of depletion is “the other fisher”.

The inclusion of individuals within the community’s production model is the prime factor of discipline: it is based on obedience to the working model and all the socioprofessional rites. Observation of the various communities shows that their form of discipline is fundamentally paternalist and traditionalist.<sup>13</sup>

The representation of community access to wealth is based on very simple principles: that of the interaction between the various fishing techniques and, if “the sea is for everyone”, then “everyone must be able to live from their work”. Hence, one person’s fishing has the effect of frustrating that of the next person. It is thus up to the community to regulate the use and restrict the effort of all the various techniques, by establishing a list of conditions, the degree of strictness increasing with the power of the technique.

Professional paternalism is consequently a series of social control mechanisms aimed at ensuring order within the group, as well as its sustainability. These mechanisms have the effect, among others, of setting aside a minimum share of the resource for each member of the community to ensure his or her subsistence. Restrictions on the fishing effort and monitoring of each member by the group itself make sure that this requirement is met.

However, paternalism also expresses itself through the collective services set up by the community, such as maintenance of equipment, stores, landing of the craft, marketing and representation of the group’s interests. Finally, there is the organization of group solidarity for all the members of the community through, for example, solidarity funds, group fishing,<sup>14</sup> and support systems for families and individuals in the case of misfortune at sea.

The conservative nature of this system can be seen in the opposition by community representatives to any technical innovation likely to increase the intensity of fishing in their territory. In order to put this second principle into effect, the community produces traditional regulations for fishing operations – these regulations may be

<sup>12</sup> cf. concept identified by Badouin, 1967 (Ph.D. thesis in Economy, Montpellier).

<sup>13</sup> cf. Féral and Tempier for France; Alegret for Spain; Collet for Calabria and Sicily; Louis for the Kerkennah islands, etc.

<sup>14</sup> Group cohesion is strongly favoured by collective forms of fishing such as large beach seines, tuna nets in Le Grau du Roi, flying *madraques* in Carro and group *canasse* techniques for mullet fishing in Tunisia.

written, as in the case of the *prud'homies* in France and the *cofradías* in Spain, although most often they are not, but are transmitted by oral tradition.

Studies have been made on these traditional rules of fishing in France from the considerable documentation accumulated by the fishers' *prud'homies* since the twelfth century.<sup>15</sup> However, they are far from exhaustive, and much remains to be done, particularly in the communities of the Maghreb, Greece, Malta, Spain and in Italian fishing villages. Yet it is common knowledge that such rules do exist or have existed practically everywhere in the Mediterranean. They establish the calendars for the use of the various small-scale fishing techniques; they lay down the periods and zones for fishing, and the reserves; they organize the drawing of lots for fixed fishing posts; and they lay down the size of gear, the rigging, equipment and nets. In Spain, the communities even control the seafood markets.

Finally, the community also ensures that its rules are enforced. It arbitrates in cases of conflict over the use of resources, and acts as a court of law. However, the members of the community control and monitor the individuals through a tutelary social system.

#### **1.4 The community: the basis of the artisanal model of small-scale fisheries in the Mediterranean**

Many authors contend that fisheries in the Mediterranean can only be small-scale, family fisheries. However, this feature is but the interface of membership of a community, which imposes restrictions on the fishing effort of all its members, and in fact determines the very content of the concept of small-scale industry; there are no real small-scale fisheries outside fishing communities. It is the community which, through the local regulation of the fishing effort, determines the content and technical features of fishing activities – it imposes a traditional model of exploitation.

We can illustrate this technical dimension of small-scale fisheries in the Mediterranean through the notion of a *métier* or *petit métier* used in the French Mediterranean, which may be taken as a prototype. *Métiers* are the different fishing techniques generally used with one or several gear within a community territory: setnets, driftnets, longlines, creels, dragged gear, lines, *fichoires*, etc. Several hundred techniques are still used today by fisher communities in the Mediterranean. Each of these *métiers* is subject to traditional restrictions on the fishing effort: size, number, intensity, period, site of fishing, according to a fishing calendar and to the real or supposed interaction of the different techniques.

Throughout the Mediterranean, this range of techniques allowed on a restricted basis determines the multiple forms of fishing used, which interact with all the resources available within the community territory.<sup>16</sup> This multiple nature varies according to the shape of the coastline and the resources available, but is a natural feature in small-scale fishing units.

By restricting the fishing effort of the various gear allowed, the community also imposes the small size and similarity of craft within a single community. Boats are always less than 10 m long, and the shape, rigging and layout of fishing vessels conform to a “community standard”.

This standardization is not a technical fact,<sup>17</sup> but rather a sociological fact explained by both the mode of knowledge transmission, and also by the implicit ban on individuals contravening the traditional model of exploitation.

<sup>15</sup> cf. extensive bibliography at the end of this publication, and Tempier, Féral, Rey and Frangoudes for more recent studies.

<sup>16</sup> cf. Doumenge (1951), Tempier (1986), Franquesa, Malouli and Alarcón (2001).

<sup>17</sup> It is not the technical or even financial incapacity of building larger boats or introducing more powerful techniques that explains the standardized layout and size of the boats; it is the implicit ban by the community on amassing additional technical means.

Thus, outwardly, it would seem to be an individual enterprise, since there are almost as many vessels as there are small-scale fishers. Serving on another person's boat is exceptional. A young sailor is often a son or relative serving an apprenticeship before becoming a fishing boat owner himself.

Nevertheless, the participation of women, elderly people and children, and the establishment of the capacity needed through self-finance and/or family inheritance show that the small-scale enterprise is in fact a family microenterprise. Apart from the vessel, which is standardized by the community, the work is divided, knowledge transmitted and equipment accumulated, repaired and maintained collectively. In the French area of the Mediterranean, fishing activities are conducted by a skipper/sailor partnership. The unmeshing, landing of the boat, packaging of the fish, and repair and maintenance of the gear are all undertaken by an informal group of children and elderly people who are paid in kind. The setting up of the net and the sale of the fish are often women's responsibility.

Finally, emphasis must be put on the importance of collective fishing, which makes it possible to distribute income among all the members of the community and which, once again, expresses community paternalism. Group cohesion is greatly nurtured by collective fishing, such as large beach seines, tuna nets in Carro, Le Grau du Roi and Palavas in France; flying *madragues* in Sicily; and group *canasse* techniques for mullet fishing in Tunisia, Languedoc, Corsica and elsewhere.

Thus, what in the Mediterranean are known as small coastal fisheries are part of the universal model of fishing communities. This model is self-governing and autarkic, and aims to respond internally to all the professional needs of the group members. It cannot be interpreted from the perspective of an individual enterprise with modern economic rights. However, we have obviously described the model by giving typical examples. In fact, the fishers' communities are not fixed in their past. In the Mediterranean today, their population and functionality have declined significantly, as a result of both their socio-economic and cultural environment, and their internal crises.

We shall now look at the competition the community model is facing from semi-industrial fisheries.

## **SECTION 2. THE ORGANIZATION OF SEMI-INDUSTRIAL FISHERIES**

Given the aim of this publication, a societal definition of the marine fisheries industry in the Mediterranean is proposed here. One feature of this type of fishing is the fact that it breaks with the community model, and it is generally state-regulated.

### **2.1 The societal definition of semi-industrial fisheries**

We have reflected at length on the criteria to adopt in order to differentiate small-scale fisheries from industrial fisheries and it will be seen that the various legal answers are not satisfactory. If we were to apply the legal criteria used by the administrations of the different Mediterranean countries, industrial fisheries would scarcely exist at all. This confusion means that, in the case of the Mediterranean, we talk of "semi-industrial fisheries" to describe a form of fishing which, although not comparable to fisheries in the Atlantic, for instance, can neither be considered the same as community fisheries.

The category of small-scale fisheries covers almost all fishing units although most people agree that this classification is senseless. The same is true for the rule based on the size of boats which, in France, for example, covers those up to 24 m long. Other approaches attempt to distinguish the two types of fisheries by the different techniques used; trawlnets and ringnets would thus "by nature" be industrial techniques. Yet still others talk of small-scale fisheries and coastal fisheries (Tunisia and Morocco).

However, in fact, the difference between the two forms of exploitation does not lie in the size of the boats or even the type of gear used. Size and specialization are only the consequence of the social and economic context of the fisheries concerned.

The formation of fishers' groups outside the community is not new, and many occurrences of maritime emigration in the history of the Mediterranean have led to open conflict with local fisheries. Consequently, semi-industrial techniques often appear to be threats to territories and community joint use. They always conflict with "sedentary fisheries", i.e. fishing from tartans or *paranza* trawlers.<sup>18</sup> However, when considering extracommunity activities, it should also be noted that neighbouring lords would appropriate fixed fishing units, such as *madragues*, tuna nets, fish corrals and *charfia* fish traps.

The semi-industrial group is therefore characterized first and foremost by a break with the community tradition of the Mediterranean. Today this break has been reinforced by its inclusion in state industrial policies in the Mediterranean over the last 50 years. This means that the characteristics of fishing described above must be reassessed. According to our analysis, it is neither the size of the boat nor the type of technique that determines the industrial or small-scale nature of fisheries; it is rather whether they are part of the traditional model, or are not subject to traditional social control, a trend today facilitated by the intervention of the authorities.

Therefore, throughout the Mediterranean, alongside the original community model, groups are being set up consisting of people who work on larger boats, particularly those that use trawlnets and ringnets for tuna and small pelagic fish. These types of fisheries can also be found in the Mediterranean basin, although they are less ubiquitous than the hundreds of marine burghs set up by the communities. In a few specialized ports, and in the port areas of the large towns of the Mediterranean, whole areas are given over to semi-industrial fisheries, defined as decommunitarized and state-regulated fisheries. Sète in France, Sfax in Tunisia, Al Hoceima in Morocco, Barcelona and Malaga in Spain, and Gaeta and Catania in Italy are examples.

A semi-industrial fishing port also differs from a marine burgh in the size of the accompanying infrastructure required for the sector to function, and in the emergence of a series of services external to the profession, such as boat and superstructure construction and maintenance, marketing, storage and packaging of the catch. There are also fishers' quarters and family and clan traditions, although these are not of the same importance in terms of organization as for the communities.

## 2.2 The decommunitarization of semi-industrial fisheries

Semi-industrial fisheries elude the system of traditional control, in that fishing is individualized, the system of territorial use rights is overridden, and the implementation of internal rules of professional discipline is refused. This is why such fisheries can only be understood in the state context.

### 2.2.1 The deterritorialization of the working area

Whereas community territories are built up from the specific history of the different communities, semi-industrial fishing is based on the principle of individual freedom of access to fisheries resources. Fishing units may consequently, in theory, operate wherever they have the technical capacity to do so. Semi-industrial fishing units set up in places where the operators and infrastructure meet their logistic needs. In this way, there is a phenomenon of semi-industrial fishing units concentrating in ports, without this in any way representing a community phenomenon.<sup>19</sup>

The semi-industrial units do not work on the basis of any territorial principle and make little use of the traditional identification of sites, spaces and species. We may speak

<sup>18</sup> cf. for example, the conflicts in Gruissan, Sète and Leucate (France) in the eighteenth century, which led to the destruction of 26 *paranza* trawlers by agents of the king in 1770 (Larguier, 1999). Larguier emphasizes the role of the Admiralty, which would encourage some fishing practices and discourage others, in accordance with its objective, which was to train as many fishers as possible, who could then also serve as sailors on the king's ships.

<sup>19</sup> cf. Meuriot (1986) and Berger and Catanzano (1985).

of the decommunitarization of the territory through the acquisition of scientific and technical knowledge that does not come from the group but from external expertise. The extent of the working area around the port to which they are attached basically depends on the technical navigation and fishing capacities of the different vessels. Nothing within the group prevents the different units from working everywhere; community joint use cannot be enforced against them.

Where territorial limits do exist, they take the form of norms imposed from outside the group in the national or international context: the limits on intrusion into waters at and within three nautical miles of the coast, for example. This presupposes the constitution of state systems of arbitration and an administrative structure that decides on and legitimizes these spatial rules.

### *2.2.2 The individualization of fishing and the mediatization of maritime knowledge*

The semi-industrial exploitation of fisheries resources consists in the introduction of competition between fishing units in harvesting the natural wealth with maximum efficiency. In fact, that wealth is taken by the fishing unit with technical superiority to appropriate the resources from its competitors. In the semi-industrial fisheries of the Mediterranean, the principle of freedom of access to the resource and the freeing of the fishing effort from constraints find their expression in innovation, technology transfer and the accumulation of technical capacity.

The principle of industrial fisheries is thus based on an affirmation of the freedom of access to fisheries resources and individual economic freedom: these are consistent with the world economic system of reference. They consist of freedom of establishment, freedom of trade and industry, and freedom of production.<sup>20</sup>

The original concept, in theory, prevented any restriction on the fishing effort of the semi-industrial units, as such a restriction would contradict the very principle of competition for access to the resources. This, of course, is the initial concept of semi-industrial exploitation, which is increasingly being restricted by state policing measures resulting from the overfishing of resources. The fishing effort is expressed in the establishment of an enterprise capital, which is not restricted to family self-financing. The role of the shipowner, public subsidies and specialized establishments help to support the equipping of the industrial unit, speculating on its capacity to appropriate resources from other operators.

Within this industrial model, the elements that produce the cohesion and usefulness of the community thus come from outside the group; in particular, there is the mediatization of knowledge and services. The role of technological innovation in the exploitation strategy is fundamental in this system. However, this knowledge is transmitted by experts outside the fishers' group – the colonizer, the scientific administration, cooperation programmes, the school system, or service and equipment professionals.

### *2.2.3 The absence of professional discipline*

The inability to organize professional discipline is certainly the factor that most distinguishes the semi-industrial from the community model. We have seen that, for the community, fisheries are a "zero-sum game" which implies imposing restrictions on each person for the survival of all. This paradigm becomes implausible in the industrial model, which has grown up with the idea of the inexhaustibility of fisheries resources.<sup>21</sup>

As in the case of market access, the principle of restricting the fishing effort goes against the individual logic of free access and business competition. Semi-industrial

<sup>20</sup> There are recent works on this topic by Sobrino (2000), Otero Lastre (2000) and Ruíz García (2000) on the legal difficulties facing fisheries enterprises in Spain that wish to apply the principles of freedom of enterprise.

<sup>21</sup> cf. on this idea, for France in the 1960s, Giffard (1967).

fisheries do not even consider the interaction between the various types of fisheries since, for them, access to the resource should be based on the superiority of the technical capacities of the various competitors.

In disputing the rules based on the fundamentally paternalistic and traditionalist model considered above, the industrial fishers' group denies itself the possibility of any internal regulations. With just a few exceptions for the trawlers and seiners, the profession thus exerts no "professional regulation" from within, particularly with respect to sites, the size and power of boats, the rigging of the gear, and the fishing periods. This absence of internal rules means that policing and regulations have to be imposed from outside.

### 2.3 Semi-industrial fishing and state regulation of the fisheries sector

The political context within which the fishing industry has developed explains the existence of an interventionist administration performing the regulatory functions that in the past were fulfilled by the fishers' communities.

#### 2.3.1 *The political context of the industrialization of the fishing sector*

The public authorities, represented by neighbouring lords or the state, have always intervened in conflicts between fishers. However, the traditional objectives of the authorities in the Mediterranean were to avoid conflict and maintain a maritime population capable of manning the navy.<sup>22</sup> Current developments in semi-industrial fisheries, which we have defined as "decommunitarized" fisheries, are very different from the outsider/locals conflicts mentioned above; they can only be understood in the context of economic interventionism by public authorities after the Second World War.

In France, this movement began in the 1960s with the decolonization of Algeria. In Spain and Italy, it appeared in the 1970s with encouragement by the public authorities for the extension of fishing technologies and logistic means. In the Maghreb, and particularly Tunisia, industrialization occurred in the 1980s and 1990s, propelled by the "development syndrome". We thus speak of the "modernization" and "development" of the fisheries sector, according to progressive algorithms.<sup>23</sup>

In socio-economic terms, the industrialization of marine fisheries may be seen as a process of intervention in which the public administration (and particularly the state administration) takes over the various social functions previously assumed by the communities in organizing the sector. It is in this context that we can consider the various marine fisheries institutions and legislation gradually introduced by the governments of the Mediterranean countries.

#### 2.3.2 *The establishment of the administrative apparatus for industrialization*

In the acquisition of maritime knowledge, the scientific administration – in the form of institutes and biology laboratories – is responsible for gathering data related to the resource, and transmitting these to the profession. The administration is also initially responsible for technology transfer and the modernization of fishing practices.<sup>24</sup>

In the formation of the technical capacity (and particularly boat construction), public subsidies fund and allow the establishment of specially fitted vessels.

<sup>22</sup> cf. Larguier (1999).

<sup>23</sup> cf. Berger and Féral (1987).

<sup>24</sup> An illustration of this model in France is the French Research Institute for Exploitation of the Sea (IFREMER), which resulted from the merger in 1976 of the Scientific and Technical Institute of Maritime Fisheries (ISTPM), a purely scientific body that came under the merchant navy (but had responsibility for some health control tasks), and the National Centre for Ocean Exploitation (CNEXO), which came under the Ministry of Industry and was responsible for the "exploitation" of maritime resources. The Spanish Institute of Oceanography (IEO) has a similar history, founded in 1929 under the Ministry of Public Education; after its reform in 1984, it was placed under the Ministry of Agriculture, and is responsible for more economic tasks.

In the field of infrastructure and services required for the semi-industrial sector, the ports, technical zones, landing and storage areas, and marketing systems are organized on the instigation of the public authorities.<sup>25</sup>

And finally, in order to provide a substitute for the system of professional discipline, the public authorities set up a “fisheries police” who regulate both fishing activities and the gear used. However, this also makes the administration responsible for the surveillance of fishing operations.

To sum up, the state control of the sector can be seen in the establishment of a centralized and deconcentrated organization, generally under the aegis of one or several ministries responsible for its supervision. These various administrations are the following.

- A scientific administration responsible for maritime knowledge, producing studies, research and documentation using scientific means.
- An administration for the control of fisheries activities, which produces policing standards and is equipped to conduct control operations.
- An administration with economic responsibilities, which promotes the establishment of the technical capacity and infrastructure, and generally has both funds for intervention and a centralized power to set standards.

Thus, until after the Second World War, there existed throughout the Mediterranean a decentralized form of organization, based on community self-discipline, and this to the general indifference of the public authorities, perhaps because the Mediterranean is not a rich sea. However, from the 1950s onwards, under the influence of a certain degree of welfare statism, a centralized scientific administration appeared, with public industrialization policies being introduced as fish became a rare resource.

Initially, public intervention only replaced community mechanisms in order to promote particular actors who followed its own theories of modernity and progress. This was the phase of encouragement and development of the semi-industrial sector, based on technology transfer and the establishment of a specialized fleet.

The administration then took action, no longer just to build up, but now to intervene in the many crises in this sector destabilized by excess capacity – the market crisis, the resource crisis, the crisis in fishing businesses, and the demographic and social crises. This is the phase of spiralling interventionism in which we find ourselves today.<sup>26</sup>

The semi-industrial sector therefore needs the “public interventionism” to which it is linked:

- first, to evade the community rules of discipline;
- second, to establish its industrial technical capacity, by means of public subsidies;
- and finally, to deal with the many crises in the semi-industrial sector.

### *2.3.3 The Mediterranean semi-industrial model*

The bases of the Mediterranean semi-industrial model are consequently formed by its extracommunitarian features and by state intervention.<sup>27</sup> It does not have an industrial tradition comparable to those of the industries of northern Europe or the international fisheries of West Africa. It is, in fact, a creation of the state economic interventionism from the 1960s onwards within modernization and development policies. It covers

<sup>25</sup> In France again, the case of Sète is symbolic. For a small number of boats, the public authorities funded ports, fish auctions, freezing centres, etc., for what today are considered to be controversial economic results.

<sup>26</sup> cf. on this interventionist spiral in the welfare state approach, the example of the sardine industry in France (Berger, 1986).

<sup>27</sup> In the history of the Mediterranean, trawlers can be found in conflict with traditional fisheries from the sixteenth century onwards; however, their development was always restricted by the authorities who tended to protect community interests; Larguier (1999) on *paranza* trawling and tartans in the Gulf of Lion.

regular daily fishing using trawlnets over restricted areas with the major part of the catch marketed fresh; it also includes fishing for small pelagic species, but for only a small food industry (mainly sardines and anchovies). There is also a small monopolistic fleet of seiners operating throughout the basin, hunting the same stock of bluefin tuna.

This semi-industrial sector represents less than one tenth of the fishing units in the Mediterranean, and a population of less than 20 percent of all the fishing boat skippers and sailors in the basin. It is, however, the subject of most public intervention.

- The major part of the “semi-industrial” units is specialized in one specific technique, the ringnet and the trawlnet being the most common.
- The vessels are bigger than those in the community sector: from 16 to 30 m.
- The semi-industrial sector has specialized infrastructure and services on land.
- For both their fishing activities and investment, people work under a centralized administrative supervisory authority.
- The sector is characterized by the use of a large unskilled labour force employed on the boats as sailors<sup>28</sup> or on land for landing, packaging and maintenance.

Semi-industrial fisheries cannot be defined by technique or size of vessel – there is no “naturally industrial” interpretation. Fishing units today can be specialized in longline or gillnet techniques (longliners and gillnetters, drift tuna netters) and use increasingly long gear. In some Languedoc lakes, fishing from *travaques* is also taking on industrial dimensions. Although the boats may be only 5 m long, there is no limit as to the number of creels used, nor any set fishing period, and it has been found that unskilled labour is used for the less important activities. These *petits métiers* are now following the industrial logic:

- no self-limitation on fishing activities by the profession;
- no fishing calendar;
- productive specialization in one technique;
- trend to excess capacity;
- use of unskilled labour in a framework of strong hierarchization and functionalization of tasks.

On the other hand, small-sized ringnets and dragged gear can still be found, with restrictions on size and rigging, which are used according to calendars and confined to clearly identified sites. These practices and gear are thus “communitarized”; with this traditional control on their fishing effort, they come under the small-scale model described above.<sup>29</sup>

### SECTION 3. THE DIALECTICAL RELATIONSHIP BETWEEN THE TWO TYPES OF FISHERIES

The “two typologies of fisheries” described above exist in competition and opposition, but according to a dialectical relationship within which exchanges are not only conflictual, in contrast to our previous description, which was intentionally based on archetypes, and presented the dualism of fisheries in the Mediterranean according to highly typified models. However, although this problematic presentation is relevant, in reality things are much more complex, since the history of marine fisheries in the Mediterranean gives these dialectical relationships between the two worlds a “momentary” dimension.<sup>30</sup>

This dialectical dimension today explains the reasons why the dualism of fisheries appears only exceptionally in public fisheries policies.

<sup>28</sup> This is true particularly in Morocco and Tunisia, where 16-m boats can employ up to 35 people. The share-based wage system probably explains these numbers.

<sup>29</sup> cf. the small dragged gear used in Provence and on the Côte d’Azur in France, the small ringnets used in Italy, or the small driftnets made for small pelagic fish in Languedoc.

<sup>30</sup> Dialectical and momentary are taken here in the Hegelian sense. On the internal dynamics of these two worlds, see Alegret (1987) within the *cofradias*.

### 3.1 The confrontation of two fisheries logic

The representation of the coexistence between these two types of fisheries is often based on the hypothesis that the two worlds live in parallel. In fact, they are in competition and in conflict for the resource.

#### 3.1.1 *The unenforceability of community rights and the confiscation of the resource and the market*

The fishing industry is being built on the negation of community territories, since the semi-industrial units recognize no spatial limit on the exercise of their activities. Hence, the area of activities of a seiner and a trawler may cover several territories, in application of the principle of the freedom of fisheries and the legal regime of the sea as *res communis*. The right of semi-industrial units to penetrate and to fish in all the maritime zones of coastal states has thus been recognized throughout the countries of the western Mediterranean.

However, this freedom to navigate and to fish is little compared to the negation of the traditional rules of discipline. The trawlers and tuna vessels, in particular, deem themselves not subject to the rules of discipline imposed by the communities, which they consider applicable only internally. This negation of the rights of the communities is a powerful factor of destabilization, which has sometimes unfortunately been confirmed by the state administrations.<sup>31</sup>

The other interaction between the two forms of fisheries concerns the confiscation of a large part of the resource by the semi-industrial units, which destabilizes the small-scale fishers' incomes. This confiscation takes several forms.

First, there is pure and simple confiscation of some fish stocks previously used within the community calendars. This is the case, in particular, of small pelagic fish and tuna. These species used to form part of the regular income of the communities, and their numbers begin to deplete whenever semi-industrial techniques are authorized.<sup>32</sup> The other form of confiscation is when the industry reduces the fish stocks to such a level that catching a target species requires increased fishing effort, beyond the capacities of small-scale fishers. This occurs in the Mediterranean particularly where many stocks of demersal fish have been seriously affected by overfishing by trawlers. It should also be noted that the collective techniques used for tuna and small demersal fish would seem to be the first victims of industrial fisheries, notably with the disappearance of flying *madragues* in favour of ringnets, and the ban on beach seines, which are considered comparable to trawling.

A final aspect of confiscation is that of the market; with its large-scale catches, semi-industrial fishing has an effect on prices. Hence, some small-scale fisheries products have been replaced by the products of semi-industrial fisheries. The case of tuna and small pelagic fish is particularly illustrative of this. Small-scale fisheries rarely form part of a true production line that is able to benefit from the industrial fisheries auction markets.

Even partial confiscation of the resource has serious consequences on the communities and the small-scale fishers. For the latter, the end of a stock reduces their flexibility, and closes the fishing calendar; they are thus increasingly forced to specialize, and they end up in a spiral of overfishing. For the community, the end of particular resources increases tension among the various specializations left, and forces it to limit the activities of the various specialists in order to maintain the course of

<sup>31</sup> cf. the attitude of the French administration regarding the regulations of the *prud'homies* in the 1960s, in order to impose industrialization (Tempier, 1995; Féral, 1986).

<sup>32</sup> cf. the case of Palavas in France, studied by Doumenge in 1951, where large pelagic fish represented a third of the community's income. Comparative studies in 1976 showed that this income had completely disappeared (Féral, 1979).

its paternalist objective. This objective is sometimes impossible to maintain, and the community has to let the fishing effort split up into the different *metiers*.

### 3.1.2 *The destabilization of community discipline*

Because its knowledge is of scientific and administrative origin, the industrial model represents a challenge to traditional knowledge. Henceforth the keys of access to the technique, knowledge of the species, sites and meteors no longer come from the community's internal traditions. Service professionals, databanks, experts, official bodies and sophisticated equipment are the sources that convey maritime knowledge. The legitimacy of the rules laid down by the community is weakened since it has neither the monopoly on knowledge nor the superiority of that knowledge. The sailor is no longer dependent on an apprenticeship provided by the community, and may find that such knowledge can be acquired by non-traditional means.

This immediately leads to an internal questioning of the traditional model of exploitation and its rules of discipline. The traditions of fishing are a serious limitation on individuals, and individual results are minimal. In contrast, another form of exploitation increases financial success while reducing the constraints. Given this situation, it is understandably difficult to impose economically and socially discredited rules on members of the communities. Why should a fisher continue to restrict his fishing activities when others are accumulating huge technical means and are even encouraged to do so by the public authorities? Why respect calendars, constraints on rigging and the length of gear when the professional model is one of capitalistic success?

So it is that community discipline today is often hardly discernible, disputed and eventually no longer functions. The community is denied its social, legal and economic existence, which is replaced by the logic of individual enterprise, according to which the small-scale fishers no longer depend on their community but rather on their own initiative in the context of centralized laws and regulations.

## 3.2 A sociocultural interpretation of the two maritime societies

The dual analysis of community and semi-industrial fisheries produces a problematic reading of marine fisheries in the Mediterranean. However, it would be ridiculous to present the two worlds of fishers as a segmented model in systematic opposition. As with any dialectical link, the exchanges between the two populations and their poles of interest are complex, contradictory and sometimes complementary. These links may be illustrated under several headings: professional demography, gregarious culture, professional knowledge and complementarity of the form of fishing.

### 3.2.1 *Limited demographic links*

Very often, semi-industrial fisheries have grown out of intervention by fishers from outside the communities. Bringing new technologies and a new production logic, they come into conflict with the existing communities.<sup>33</sup> We may thus speak of "new actors" from outside who form a new population, are not integrated and are therefore insensitive to community codes of conduct.

These two communities are very, but not completely, separate; there are crossovers of labour from the communities to the semi-industrial fishing boats. The maritime skills and traditional technical knowledge of the communities are greatly welcomed by the professionals from the industry. However, as numerous as they may be, these defectors remain marginal, and often work as a skipper, captain, *raïs*. The unskilled sailors on the semi-industrial fishing boats generally do not come from the local communities but

<sup>33</sup> cf. in 1962 in France, with the immigration of fishers from Algeria, but also in the Maghreb. During colonization, the colonists took over coastal areas from small communities that often had little interest in the sea.

are often recruited from the “non-maritime” populations, or from immigrant maritime populations. There is a sort of refusal of proletarianization on the part of the small-scale fishers, and this can be seen throughout the Mediterranean.<sup>34</sup>

However, the most important form of mixing is where individual members of the communities have themselves built up industrial capacity and committed themselves to the new enterprise, breaking with their origins. Encouraged by public industrial policy, these units are often encysted in the community marine burghs; in other cases, small-scale fishers emigrate to be able to exercise their new activity, and return with a new production model.<sup>35</sup>

In short, there would seem to be little mixing between the two populations,<sup>36</sup> but the sociological importance of the little that does occur greatly outweighs its numerical significance, since it challenges the production models, knowledge and traditional discipline of the communities. Very often, in Spain in particular, the two populations have common origins and blood ties, which mean that the same line of descent leads to two distinct professional populations.<sup>37</sup>

And finally, in anecdotal fashion, the fishers of the *grands métiers* can practise small fisheries in a recreational and symbolic way, on retirement or during their leisure time, when they then integrate into the community environment.

### 3.2.2 *The convergence of maritime cultures*

Even though they are in competition, the two worlds do meet through their professional maritime culture. In dealing with the same natural environment, catching the same species and navigating the same waters, the small-scale and industrial fishers share part of their individual experience.

In this way, the representations, beliefs, legends, traditional knowledge and traditions are transmitted from the communities to the industry, and vice versa. Boat building, language, gear rigging and the transmission of technical expertise all bear witness to the degree of this cultural exchange.<sup>38</sup> In addition, there are also eating habits, rites and superstitions, and the integration of religion, which form part of the collective set of references. Hence, it is not impossible that a certain concept of the professional code of conduct inherited from the communities should also be shared.<sup>39</sup>

The similarity of the identity processes of the different groups is also a cultural link between the two worlds. The industrial ports build up their own identity despite the principle of individualized exploitation; votive festivals are celebrated in every port in Italy, France and Spain. The membership rites of an industrial group are a stage in the communitarization of the group. The same is true for the territory; for example, the Gulf of Lion in Languedoc has been appropriated by trawlers with licences from Sète, Le Grau du Roi and Port Vendres. Unfortunately, this identification only occasionally leads to internal rules of discipline.

<sup>34</sup> cf. the sporadic introduction of the seine net for small pelagic fish in Palavas in France, and the impossibility for new units to find indigenous labour. Immigrants came first from Gaeta in Italy in the 1960s, then local non-maritime labour was recruited in the 1970s, and then labour was recruited from the Maghreb in the 1980s.

<sup>35</sup> On the encystment of industries within existing communities, cf. in France, the cases of Martigues, Grau du Roi, Port la Nouvelle and Grau d'Agde. On small-scale fishers crossing over, cf. the cases of Sfax in Tunisia, Al Hoceima in Morocco and Sète in France.

<sup>36</sup> cf. the case of Sète in France where the two maritime populations have lived separately since the beginning of the twentieth century: Sète on Lake Thau, where a population originating from Languedoc engages in “small trades”, and Sète Mole, facing the sea, where trawlers and seiners are used by an immigrant population of Calabrian origin.

<sup>37</sup> Observation from J.L. Alegret with respect to a serious open conflict in the Palamos *cofradia* in Catalonia, Spain: “we cannot fight because we are all cousins!”.

<sup>38</sup> This is the case, for example, with the various navigation and fishing terms of Italian origin used on boats from Valencia in Spain to the south of Tunisia – in Catalan, Languedoc, Provençal, Ligurian, Italian, Calabrian, Sicilian and Tunisian Arabic.

<sup>39</sup> cf. in this respect the study conducted by the Commission of the European Union on ethics in maritime fisheries (Collet, 2000).

### *3.2.3 The establishment of traditional knowledge in the industrial sector*

While the principle of industry is, in theory, based on the acquisition of external knowledge, a true maritime culture does exist in the semi-industrial fisheries ports, and knowledge transmission also derives from the traditional knowledge of families and apprenticeships. There is still, therefore, an embryo of communitarianism even within a group dominated by competition, since traditional knowledge is conveyed not only by tradition but also by professional experience. Industrial knowledge is thus a combination of internal and external knowledge. But, and this is the difference from community knowledge, it is the sum of all this knowledge that is used to compete with and confiscate resources from other competitors. Traditional knowledge therefore no longer acts as a regulator, as it does in the community setting.

Finally, to complete the picture, semi-industrial fisheries can partly contribute to the activities of small-scale fishers; this is particularly true for bait, such as small pelagic fish or small Mugilidae bought cheaply from seiners and trawlers by the small-scale fishers. Loans of equipment and exchange of labour between the two types of fisheries are also known and quite common.



# An analysis of the legal framework for fisheries

This chapter looks at the way in which law in the Mediterranean deals with the duality of fisheries. The issue does appear, although not explicitly, in Mediterranean public fisheries policies; it can only be discerned in fisheries law in the light of the analysis given in the previous chapter. This “implicit dualism” probably explains the many contradictions found in the fisheries policies of the various Mediterranean countries.

Faced with the societal law and institutions that developed spontaneously within the fishers’ communities in the Mediterranean, state maritime law has gradually imposed itself, although without obliterating the community legal tradition; the latter can still be detected in the various maritime legislations. Given this situation, it is interesting to decrypt what today is the syncretic product of these two legal sources. We shall use legal categories with their classical legal definitions; however, the interesting aspect of these developments is their interpretation in the context of our topic, using the law not as a standard, but to reveal what lies beneath.

## SECTION 4. THE AMBIVALENCE OF THE PRINCIPLE OF *MARE LIBERUM*

The principle of freedom has only seen effective implementation since the industrialization of fisheries. It can be found in the background of the conflicts between communities and industry, and of all fisheries policies. Despite the restrictive developments and trends in maritime law, freedom is still the basic rule of access, and it can only be suspended by legal contortions.

### 4.1 The content of the principle of *mare liberum*

The subrogated competence of neighbouring states in policing and authorizing occupancy has been established on the basis of the principle of freedom, which is also the basis for international regulations concerning fisheries management.

#### 4.1.1 *Origins of the principle*

The principle of the freedom of marine fisheries is today recognized by the whole international community. This regime of freedom is based on the definition of the high seas as *res communis*, which means that fisheries areas cannot be claimed as private property.<sup>40</sup> For all the Mediterranean countries, the regime governing maritime areas can be expressed in the following principle: “the sea belongs to everyone, and is used by everyone”. In this context, the right to fish is a public matter, since it is an accessory to people’s right to maritime areas. Since the seventeenth century, this principle has served as the basis for a legal regime of free access to maritime areas for multiple activities.<sup>41</sup> However, recent international instruments<sup>42</sup> have tended to restrict the

<sup>40</sup> Some patrimonial fishing rights are wrongly assimilated into property rights; they are in fact only concessions, the personal rights to which are transferable conditionally. See the case of the fishing establishments of Kerkennah in Tunisia, and a long legal controversy during the colonial period with the administration responsible for the merchant navy.

<sup>41</sup> cf. the controversy that began in the seventeenth century between the theses of Selden (*Mare clausum*) and Grotius (*Mare liberum*), the latter of which today prevails in international public law.

<sup>42</sup> In particular, the FAO Code of Conduct for Responsible Fisheries, adopted in 1995, and the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, opened for signature in 1996.

principle of freedom of fishing on the high seas; the states involved in the exploitation of shared stocks must reach agreement within the framework of international or regional organizations or arrangements, notably the fisheries commissions.

This side of the high seas, the Mediterranean states also apply a specific legal regime to coastal maritime zones, and some public property. This expresses public ownership of most fisheries areas. Both territorial and inshore waters are consequently subject to state custody, either to ensure freedom of access and movement, or for the construction of infrastructure. In theory, the shores, roads, bays, salt lakes, river mouths, soil and subsoil of territorial waters are subject to legal protection from appropriation by individuals. This does not mean that it is illegal to use them, but that any such use is “non-appropriative”.

Another principle common to all the Mediterranean countries is that sea waters are public and free-running waters, considered *res communis*, and their free use is also part of “people’s rights”. Equally, fisheries resources are considered as *res nullius*: they generally belong to the first occupant. Thus, in theory, fish belong to those who fish them. However, even if the resource may be acquired, occupancy of the sea is non-acquisitive, since the maritime area is imprescriptible.

#### 4.1.2 *The exclusive competences of coastal states over fishing rights*

The individual use of the sea by the public and by professional fishers may thus be defined as “the right to take from the sea all the benefits it can provide, as long as this does not hinder public use”. As a result, for all the countries covered in this study, the sea is imprescriptible and inalienable common property.

- The occupancy and possession of fishing territories have no effect of acquisitive prescription for the occupants.
- Ownership of the sea cannot even be ceded by the state, which is not the owner, according to the principle that “one cannot cede more rights than one has”.<sup>43</sup>

The legislation of the western Mediterranean states does not give them ownership of fisheries rights, since this is an accessory right to *res communis*. However, in the understanding of the international community and the constitution of their authorities, the coastal state is responsible for the exercise of fisheries rights within its jurisdiction. According to these principles, fisheries rights over the sea are exercised for the benefit of the state, which is therefore “subrogated to the rights of everyone”.<sup>44</sup> The authorities’ missions are to facilitate use of the sea for the benefit of the public, to regulate use of the sea to prevent its abuse, and to valorize the wealth of the sea so as to ensure the greatest collective benefit.

In this respect, the state exercises powers of management and powers of special policing (see below) over the sea. The state’s powers therefore include both the possibility of regulating maritime activities and executing particular decisions enforceable on third parties, but also of retroceding, to a limited extent, part of the rights subrogated to it. These powers of management allow the state to cede, in the form of concessions with no secure title:

- the right to remove a certain quantity of resources;
- the right to occupy certain areas;
- the right to use certain gear.

## 4.2 The consequences of the application of the principle of *mare liberum*

The principle of the freedom of fishing has been applied progressively by the

<sup>43</sup> The recapitulation of these two rules puts in perspective the extent of the patrimonial rights recognized to persons over maritime space. Some authors today see the recognition of the rights of businesses and communities as a challenge to the principle of *mare liberum* (Collet; Sobrino).

<sup>44</sup> It is on this legal basis in particular that the jurisdiction of coastal states has been extended to 200 nautical miles, except in the Mediterranean.

Mediterranean states. This has had the effect of depriving the communities of their traditional rights, to the benefit of semi-industrial fisheries.

#### ***4.2.1 The unenforceability of prior rights of fishers' communities***

According to current positive law, which is the law of the coastal states, the community territories described above have the legal basis of "first occupancy". The community thus bases the legitimacy of its territory and the rules defining and protecting it on its prior rights and the length of its occupancy of the fisheries sites, which form its marine burgh and fishing territory.

Thus, for example, beaches, roads, river mouths, river banks and ponds today form the major part of the professional areas of community fisheries in the Mediterranean. Fishers enjoy the free use of this natural property for the protection and landing of boats; boat construction; the marketing and packaging of fisheries products; areas for the maintenance, storage and repair of equipment; and housing.

However, state custody rights and the principle of freedom of the seas mean that first occupancy, of whatever length, is not in itself enough to create rights, because of inalienability and imprescriptibility. In positive law, these collective occupancies of fisheries territories, which may date from time immemorial, are not enforceable on other users of the sea. And this also means, notably, that traditional rules, restrictions on the fishing effort of the gear used and fishing calendars are not enforceable either to third parties. In this confrontation between traditional law (often unwritten, traditional and corporate) on the one hand, and the law of the state (based on international principles) on the other, community customary law has not been able to maintain its position, even where it has not contravened the freedom of industry, and where there was little competition for fisheries resources.

Where these groups are not in competition with other users either for space or resources, the rule of first occupant applies to a *res communis*; this is but a recognition of fact. However, the long-term application of this rule cannot protect the rights of the first occupants. Communities are often dispossessed of their space and their resources, either for the benefit of professionals from the fisheries industry or by industrial, tourist or urban interests taking over the land.

#### ***4.2.2 The principle of freedom applied for the benefit of semi-industrial fisheries***

In fact, as in many similar situations, the principle of freedom benefits the large operators who have greater capacity to exploit the resources. Fishing activity, as an industrial and commercial activity, initially constitutes an individual economic right, access to which may only be restricted for legitimate reasons. It is based on the economic freedom recognized to persons. In all the countries of the Mediterranean, individuals and legal persons in theory have the right to practise the economic activity of their choice and to settle where they see fit. Obviously, this right is often regulated, but it is considered to be a fundamental right and has been reinforced by international conventions on freedom of trade.

In Morocco and Tunisia, for example, during the fisheries development phase, the authorities encouraged donors to invest in semi-industrial fisheries activities. This section of society considers it normal to invoke the double freedom of investment and access to resources.<sup>45</sup>

In most cases, the professional freedom of industrial fishers is imposed without any consultation with, but also without any resistance from, the communities. There is little documentation on the establishment of the fisheries industries in Morocco and Tunisia, apart from the many accounts from fishers and some other actors. However, in France, for example, we have full legal documentation, from the *Lamparo* episode and

<sup>45</sup> cf. on the economic freedom of fisheries enterprises, Sobrino (2000), Otero Lastre (2000) and Ruíz García (2000).

Algerian immigration at the beginning of the 1960s. The State Council was seized by the minister responsible for fisheries to break the communities' resistance: the principle of freedom of fisheries was quoted continually.<sup>46</sup>

### 4.3 Territorial concessions allocated under the principle of *mare liberum*

Transfer of the rights to the exploitation and occupancy of the sea for the benefit of individuals is a phenomenon frequently encountered in the Mediterranean. It may be useful to consider some cases here. The general occurrence of these insecure transfers of individual rights may also be an answer to the dual issue, and interpreted either within or outside the community context.

#### 4.3.1 *The allocation by the state of access rights and occupancy*

The principle of state ownership of maritime areas and resources means that the collective rights of communities to fishing territories have never been recognized, except in indirect institutional form (see below). However, the transfer of subjective rights for the benefit of individuals is a phenomenon often encountered in the Mediterranean. Even so, throughout the basin, since the state is subrogate to the rights of the public, it is the state services that determine the criteria and conditions for the occupancy and privative use of the sea. The procedure for the concession by the state of a fisheries or aquaculture establishment forms the legal basis for that occupancy, but its content and objective, and the procedures that lead to authorization of the occupancy, may differ greatly, according to country.

The patrimonial claim to the sea by coastal populations, and particularly by local owners or political authorities, is nothing new.<sup>47</sup> In Spain, France and Italy, and hence their former colonies in the Maghreb, the apparatus of the modern state is opposed in principle to this appropriation, but has often tempered its application.<sup>48</sup> An examination of these various concessions highlights the desire of the concessionaires to stabilize and patrimonialize their occupancy.<sup>49</sup> Despite the opposition of the legal system, which is attached to the principles of state ownership, many texts and administrative practices often improve the conditions of occupancy.

Hence, in France, Spain, Italy, Tunisia and Morocco, tuna fisheries and *madrague* fishing have been maintained and sometimes introduced, and allocated to coastal or industrial fishers, as in Sicily. On the Kerkennah islands in Tunisia, *charfias* have existed since the seventeenth century and their occupancy is passed down from generation to generation.<sup>50</sup> In the Gulf of Gabès, at Madhia and Chebââ, the occupancy of fixed fishing posts is organized by the naval administration. In the northern part of the Kerkennah islands, fish *charfias* have gradually been replaced by octopus fishing concessions (the villages of Al Attaya and Kraten). Shellfish and fish farming concessions have increased throughout the basin, and have taken over from previous occupancies in the public lakes, or in the form of maritime concessions.

Whatever form they take, we are clearly seeing an expansion of maritime areas, and the allocation of their wealth through the juxtaposition of numerous individual authorizations.

<sup>46</sup> On this episode, see Féral (1986) and Tempier (1993).

<sup>47</sup> S. Collet mentions the "fishing fiefdoms" of the Norman lords in Sicily and Calabria, instituted in the form of *madragues* or *maniguières*, and their claim to control all fishing activities "as far as the eye can see".

<sup>48</sup> Each country, of course, has its own history in terms of the construction of the modern state. In Italy and the Maghreb, feudal systems existed in opposition to these state claims; however, by the nineteenth century, the principle was recognized everywhere, even if it was not applied. Italian unity and the colonization of the Maghreb helped the statist maritime theses prevail.

<sup>49</sup> cf. the French law of 1992 authorizing the transmission of shellfishing grounds, guaranteeing family patrimonialization of the concession and also the ambiguity of the legal nature of the *charfias* in Kerkennah, Tunisia, which the families concerned considered to be real private property, in contrast to the opinion of the colonial administration. On both points, refer to Mamontoff (1998).

<sup>50</sup> cf. Louis (1952) and Audit (1956).

### 4.3.2 *The communitarian interpretation of state authorization*

The allocation of access rights to marine resources in the Mediterranean has, in theory, been the prerogative of the state, as guarantor of the freedom of fisheries, since the seventeenth century. However, in contradiction to the state's monopoly on management, certain fishing grounds were allocated by the communities themselves, which organized access to sites and resources. It is through this legal contradiction that we can glimpse the shadow of community rights in the modern laws of the centralizing state.

The *prud'homies* in France and the *cofradias* in Spain and the Moroccan part of the Mediterranean until independence<sup>51</sup> were recognized as having the right to organize a lottery for the community members' fishing grounds. The basis of this power is sometimes unclear; in France, for instance, the *prud'homie* was given administrative competence under an 1859 statutory order on the basis of prevention of strife. The lottery for fishing grounds is an authorization of temporary occupancy for the benefit of community members alone; it is a particularly important factor in territorialization, which ensures individual income, while also establishing the limits of the professional area for the benefit of the whole community.

In Tunisia, at Madhia and Chebââ, *charfias* are allocated under the responsibility of a public servant from the administration; however, the lists of beneficiaries are submitted by the community, in family or clan groups. At Kerkennah, *charfias* may, in theory, be transmitted only to a fisher, who must always have links with the communities in the south of the island. The octopus fishing concessions, in the north of the island, can only be allocated to the inhabitants of the villages of Al Attaya and Kraten. In fact, the statist concession procedure would seem only to be a screen for the community authority of the various villages in the islands. We can see that the "village" modes of regulation in the small-scale coastal fishing tradition are strengthened by the *charfias*. This territorial control, organized in the form of concessions for the fishing of demersal fish, Posidonia, octopus and mullets, strengthens the decentralized professional discipline.

In these various cases, the fixed fishing posts are of considerable importance to the balance of the environment and the functioning of the community; hence, individual rights to fishing grounds strengthen the overall discipline of the group.

- They provide a small but regular income. This is an individual right recognized by and within the community (mullet fishing in Chebââ, *capéjades* posts in the lagoons of Languedoc-Roussillon, etc.).
- They often act as "reserves" since the ritualized fishing activity involves little effort, and the individual concession keeps away other fishers and poachers.

Shellfishing authorizations can be subjected to the same communitarian analysis. Thus, on the lagoon of Thau in France, the allocation of shellfishing concessions is subject to complex rules. A fishers'/shellfishers' cooperative, in comanagement with the state administration, controls the allocation of concessions so as to avoid economic concentration and to reserve authorizations for fishers who live in neighbouring villages.

## SECTION 5. THE ACQUISITIVE EFFECTS OF PROFESSIONAL MARITIME LAW

The term "professional maritime law" is taken here to cover the personal status of professional fishers and also includes the definition and regulation of the professional categories that govern the rules of access to the profession. All these rules are of great importance in understanding marine fisheries policies, since they allow an interpretation of strategic orientations by public authorities.

<sup>51</sup> Account from Nador, Morocco, showing that *cofradias* were established on the lagoon and at Al Hoceima until 1956.

## 5.1 The appropriation of resources on the basis of professional status

The principle of free access to the sea consequently provided the legal basis on which semi-industrial fisheries developed in the Mediterranean. However, this opening is ambiguous since it in fact encouraged the establishment of individual units. When crises occurred about the resource, however, severe restrictions were imposed by playing on professional status and by policing fisheries. But this did not produce the desired effect, since these administrative measures to restrict the profession actually allowed the most powerful units to monopolize access to the major part of the resource.

### 5.1.1 The establishment of a profession regulated by professional status

In all the countries of the western Mediterranean, there is a status of people of the sea and, more particularly, a status of fishers. The fisher at sea is primarily a sailor, which distinguishes him from the shipowner (who is but the owner of the boat and its equipment). This status may be defined as “the legal and administrative regime applicable to physical persons actually exercising the profession of fisher”.<sup>52</sup>

In fact, the status of fisher confers the right of privileged access to the resource, which is defined by the right to use certain equipment to catch the different species: boats, special gear, etc. This status thus makes it possible to modulate access to the profession by limiting the numbers of the most effective gear used to a regulated population. This is one form of regulation in the implementation of fisheries policy; it affects the conditions of access to the activity. We thus refer to a regulated profession.

Administrative practices play a fundamental role here. The statuses considered may be invoked as an economic right of establishment by the person who meets the substantive conditions provided for in the legal texts. Yet very often the state bureaucracy works on internal instructions to transform this right into a procedure for prior authorization.<sup>53</sup>

### 5.1.2 The establishment of access privileges through the allocation of fishing licences

For the communities, access to resources is restricted by controls on acquiring traditional knowledge. Dissemination of this knowledge through the clan makes it possible to control the demography of the fishers operating within a territory. Demographic control is now carried out by the administration. Despite the proclamation of the principle of freedom of fishing and of establishment, the countries of the western Mediterranean have in fact limited the number of boats authorized to practise semi-industrial fisheries using trawlnets and ringnets.<sup>54</sup> Initially these measures were taken to restrict industrial fishing activities, but their *de facto* effect has been, by means of a unilateral administrative decision, to allocate the major part of resources solely to holders of these authorizations.<sup>55</sup>

Hence, the rights of communities have not been recognized by the public authorities, which have set the principle of *mare liberum* against them. However, through the system of professional status and administrative authorizations, the state has created access privileges that benefit a small number of industrial operators. They have circumvented the principle of freedom of access in order to encourage the establishment of industrial capacity. The fishing authorizations now form part of the non-material assets of the semi-industrial fishing enterprises, and are also the subject of speculation.

<sup>52</sup> This administrative regime includes a list of conditions to be fulfilled in order to enjoy such special status: professional qualifications, physical aptitude, moral standards, ownership of some equipment, contract of embarkation on a vessel, etc. The establishment of crews involves maritime categories defined on the basis of length of employment, qualifications and specialization in one type of fisheries or navigation. The status also includes a maritime social regime and professional responsibilities.

<sup>53</sup> cf. for example, in France, the permits for “Mise en exploitation” which seldom have a proven legal basis.

<sup>54</sup> For example, in France, the 11 April 1997 order “establishing the number of licences for professional fishing of bluefin tuna”.

<sup>55</sup> cf. for example, the trawlers and seiners monopolizing the Gulf of Lion (Meuriot and Dremlère, 1986), the Nador region and the Gulf of Gabès.

There is an interesting example of this. Since the end of the 1980s, and in the context of European Union policies to reduce fishing effort, France has made extensive use of restrictive administrative measures with regard to small-scale fishing activities.<sup>56</sup> This has led to prior administrative authorization becoming a general requirement, despite the fact that its legitimacy is questionable and it goes against the principles of freedom of fisheries<sup>57</sup> and of establishment.

## 5.2 The legal ambiguity of the professional categories

With the analyses of professional categories used by fisheries administrations in various bodies of law, the complex nature of the dual issue becomes obvious. Their inadequate nature may be interpreted as the legal difficulty in recognizing the existence of fishers' communities.

### 5.2.1 *The distinction between shipowner and fisher*

In the communities of the Mediterranean, the small-scale fisher combines the multiple functions of, among others, skipper and shipowner. The situation may sometimes be complex, as ownership derives most often from the family, but the skipper is generally the owner of the boat. Hence, in the community context, the term "fisher" is used to describe both the owner of the vessel and the person in charge of fishing operations.

Mention should also be made of collective shipping resources within communities, in the form of commercial associations or companies.<sup>58</sup> The capital for collective fisheries is established within the group itself. In this case, and in line with the traditional model, the community itself gathers the group's investments together in order to control them better. It also divides the income according to a system of "shares", in which both labour and capital are remunerated.

The situation in semi-industrial fisheries is much more complicated. In many cases, a combination of functions is found in a single person. However, divergence is also frequent, particularly in Morocco, Tunisia and Spain.

The profession of fishing boat owner is regulated in all the countries of the western Mediterranean, but the complex nature of the systems for putting together the capital make it impossible to define the profession of boat owner as clearly distinct from that of the other actors. In fact, assembling enough industrial capital has increased the number of actors involved, who participate in equipping the boats without there being any specific mention of them in the legal system.

The various coastal states and authorities have been extensively involved in the provision of fishing boats; through subsidies granted between the 1960s and 1990s, public entities have become partly responsible for the capital invested in semi-industrial fisheries. This funding was channelled through public or parapublic financial bodies which were thus involved in the results of semi-industrial fisheries.

Observations in the field show that some semi-industrial fishing boat owners are specialized in the provision of boats. They are symbolic sailors only, in order to enjoy the status of sailor and to be able to be considered professional fishers.

In the 1960s and 1970s, states also encouraged boat owners' cooperatives, in order to allow small-scale fishers to constitute semi-industrial capacity (Tunisia and Morocco).

Sometimes fish vendors are also covert boat owners, in exchange for exclusive contracts for the catch. These operations may be termed "clandestine boat ownership",

<sup>56</sup> Many accounts of these policies were given by fishers and members of *prud'homies* during World Fisheries Day, 21 November 2000, Six Fours les Plages, France.

<sup>57</sup> Cancellation by the State Council 14 May 1993 order, providing for a system of allocation of licences to small-scale fishers in the French Mediterranean.

<sup>58</sup> Collective *madraques* in Sicily, seine fishing companies in Provence and Languedoc. These are complex systems that can involve both joint capital and a sum of individual capitals for certain operations.

the aim of which is to integrate the fishing units into commercial chains. In this case, the fish vendor does not explicitly have the status of boat owner.<sup>59</sup>

It is not the formal and explicit recognition of the status of boat owner as such that poses the problem. However, the existence of extraprofessional financial interests does have an effect on fisheries policies, since they tend to oppose any measures to restrict the fishing effort, which would frustrate debt and loan repayments, and threaten the survival of shipyards.

This distinction is therefore not clearly established in the workings of the maritime chambers (Morocco), *cofradías* (Spain), or fisheries committees (France), which hinders the introduction of any disciplinary function since, given the boat owners' domination of these institutions, economic considerations take precedence over environmental or territorial considerations.

### 5.2.2 *The difficult legal distinction between small-scale and industrial fisheries*

This distinction is always an issue in organizing the professional categories and it is difficult to find a satisfactory legal definition of the two types of fisheries in the Mediterranean countries considered in the study.

First, there is a refusal to recognize the existence of "industrial" fisheries. For reasons linked to the maritime fiscal and social status of industrial fisheries, all the fleets in the Mediterranean are classified in the nebulous category of "small-scale fisheries", which covers everything from fishing on foot to 30-m seiners.

In order to differentiate between the two categories, the various administrations use either the length of the boat, the techniques used, or the duration of the fishing activities. Hence, in Tunisia and Morocco, the regulations have a separate category of "coastal fisheries" within small-scale fisheries. In Spain and Italy, small-scale fisheries are divided according to the techniques used. In Italy, the law distinguishes between "small coastal fisheries" and the trawlers and extensive fishing techniques used for large pelagic fish. In the French Mediterranean, the regulations differentiate between *petits métiers* vessels and boats with a trawling or ringnet licence. Two criteria are actually used, since *petits métiers* fisheries are also restricted to vessels of less than 12 m in length.

### 5.2.3 *The distinction between professional and leisure fishers*

Any ban on pleasure fishing and sailing would be a misinterpretation of users' rights, since fisheries and dependent areas are considered as *res communis*. Where there are no existing regulations on the use of and access to the sea, these are generally covered by the legal system of freedom. The freedom to sail, to come and go, to fish, to circulate, to use and to occupy (without this constituting a personal or real right) is generally recognized for anyone.

There have as yet been few problems in this respect in the countries of the Maghreb, where the pleasure sector is still small. But the phenomenon of pleasure sailing has become particularly important in France, Spain and Italy. In the French Mediterranean, there are 32 000 pleasure craft, compared to 1 800 professional fishing boats.

However, the European Mediterranean countries strictly regulate sports fishing and sailing, with bans on most fishing gear, which may be used only in professional fisheries. A ban on the use and possession of professional gear is generally the most common management measure. The fitting out of pleasure craft is also regulated for reasons related to safety and identification.

The case of Malta is exceptional. Fishing is a "popular" right there, exercised by the whole population, who derive income, food and leisure activity. This means that there are three categories of fishers in Malta: "full-time" fishers, "part-time" fishers and pleasure fishers. These singular measures show that professional status must take account of traditions and the relationships of power.

<sup>59</sup> A frequent practice in Morocco and Tunisia, which causes problems for the communities in disciplining their members. The creation of the Kerkennah cooperative can be explained by this.

## SECTION 6. ADMINISTRATIVE INTERVENTION IN THE LEGAL ENVIRONMENT

In the final part of this chapter, we must consider what the Mediterranean fisheries administrations actually produce. This does not mean making any quantitative analysis or assessment, but rather defining tasks and responsibilities in order to ascertain the decision-making functions of the various bodies.

In theory, administrative action is the instrument by means of which a policy is implemented, but this is not automatically the case. Moreover, all the various interventions together form a relatively heterogeneous list.

### 6.1 The problematic incorporation of administrative interventions in sustainability policies

All western Mediterranean governments today claim to promote sustainable fisheries; however, there are problems with the translation of these claims into reality, in terms of the objectives and means used by the public authorities.

In theory, any intervention by the administration is part of public policy. For more than 30 years, scientists have been alerting public and political opinion to the disastrous state of fisheries resources. For more than ten years, particularly since the Rio Conference,<sup>60</sup> states have agreed on a worldwide management strategy based on the concept of “sustainability” and, more specifically for fisheries, on the recommendations of the *FAO Code of Conduct for Responsible Fisheries* (1995). It must be said that there has been little translation of these guidelines into practice, and the destruction of resources has been only slightly slowed down by the formal adoption of these new options in the Mediterranean region. The administration comes up against several problems in attempting to attain sustainable fisheries.

First, there are many different objectives assigned to fisheries administrations, and the difficulty of reconciling them is fully recognized.

- Is it a matter of protecting the resource to preserve the rights of future generations?
- Is it a matter of feeding the poorest and most vulnerable part of the population and promoting small-scale fisheries?
- Is it a matter of modernizing a sector so as to gain the best economic and financial advantage from available resources, which would contribute to the development of those countries that have the responsibility of managing the fisheries?

Second, the area of administrative intervention is difficult to define with respect to knowing what is covered by sustainable fisheries.

- Is there fusion between fisheries policy and fisheries policing? Is fisheries policy restricted to fisheries, or does it also include fish farming? Should the inshore coastal police and environmental protection also be included?
- Should the basis for sustainable fisheries be only marine biology and economic efficiency? Should it also include the product and market organization? Should it be concerned with the social status of fishers? Should it deal with the construction and legal status of boats?
- At the sectoral level, should societal considerations be included in these policies? Income? Employment levels? The skills for the job? Demographic considerations?

It is not easy to define or achieve efficiency in the means used to implement fisheries policies; the interventions are heterogeneous, and their effectiveness difficult to assess.

- There are often many different regulating institutions with poorly defined responsibilities and missions, which leads to a dilution of political decision-making powers.<sup>61</sup>

<sup>60</sup> United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, 3-14 June 1992.

<sup>61</sup> National, local and international bodies, the establishment of supervisory ministerial bodies, the creation of scientific committees, the organization of international meetings, etc. It will be seen that many professional organizations exist, but they tend to organize protests and demands, rather than assume responsibilities, and their representativeness is often somewhat questionable.

- There are also many different forms of public investment in modernization and aid; however, these generally favour economic concentration and overinvestment in the sector.
- There are many forms of repressive and administrative regulation, which are little known, centralized, often incorrectly applied, or even impossible to apply.

These measures are rarely subject to the routine evaluation that should normally take place in order to assess public intervention in a sector.

Finally, despite the good will of public servants, these policies come up against the administrative culture of their implementing bodies. This culture can be perceived from the grey literature of the administrations, the speeches and development plans. It is true that fisheries policies today do state “sustainability” as their paramount objective, in order to conform implicitly to the overall model of organization. However, this has not always been the case; the administration that is responsible for these new directions today was yesterday in charge of modernizing and developing fishing operations and it has often retained its industrial concept, centralizing reflexes and technocratic culture. For several decades, interventionism was confused with technology transfer, financial intervention and centralization. What must be done today to redirect these instruments of intervention?

The reference to sustainability thus does not automatically lead to interventions likely to promote decentralization and greater responsibility for fishers, even though the declared intentions may unanimously encourage this greater empowerment.

## 6.2 The administrative tasks involved in implementing fisheries policies

The aim of the following paragraphs is to take a rapid look at the main activities of fisheries administrations, i.e. assisting in government decision-making, collecting and analysing information, and producing a series of standards.

### 6.2.1 Defining national policy

The primary work of the central administration is to define a policy for ministers. This is done, for example, in “national sector plans”,<sup>62</sup> the function of which is to build up an analysis on the basis of an assessment, to determine the objectives and define the means needed to attain them.

It is worthwhile remembering that, in all the countries concerned, this orientation exercise has been subject to significant reversals.

Initially absent from government agendas, fisheries subsequently became the subject of a development and industrialization policy. Then, for nearly 20 years, fisheries policy often consisted of dealing with crises in the sector. And finally, today, it has been given the objective of “sustainability”. However, significant elements of development and industrialization policies are actually quite akin to the intention to moderate fishing activities.<sup>63</sup> And very few sustainability plans clearly express the objectives of de-industrialization.<sup>64</sup> Moreover, sustainability is often brandished as a slogan in political speeches, without being given any operational content, although it clearly does express the need to reduce the fishing effort. There is thus overall agreement on the principle of reduction, but it is expressed in very general terms, without conflicting with the

<sup>62</sup> The three-year fisheries plans in Italy, for example.

<sup>63</sup> cf. the case of Tunisia, which took the courageous and exemplary initiative of de-industrializing the Gulf of Gabès, but which also from time to time announces its intention to “develop” the sector. See also the situation in Spain, where the position of the *cofradías* on sustainability inspired the creation of a Spanish economic zone. At the same time, the modernization of the Spanish fleet was accelerated. Very often, one has the impression that foreign fleets are treated as scapegoats, and sustainability is used as a battle horse against small-scale and foreign fishers.

<sup>64</sup> Thus the European Union objective for its member states of reducing fishing fleet capacity is expressed in terms of reducing kW power. The smallest and least harmful small-scale units were the first victims (e.g. the Mellick plan in the French Mediterranean).

interests of any particular category. It is the “administration in practice” that will have to confront social realities in the field.

### 6.2.2 *Gathering information*

Administration is first and foremost a system of information, which has to be gathered and analysed in order to allow the political authorities responsible for fisheries to take decisions. This information is also used for the system of standards to be imposed on the sector.

In the context of their supervisory missions over fishers and other actors in the sector, the administrations responsible for fisheries obviously gather a huge amount of social, economic, professional and technical data. The methods of doing this and the sources of information in the various countries visited are very similar.

The administration monitors and controls maritime demography, the number and technical characteristics of the boats, and so on. After many years, and with much still unknown, the gathering of data on the contribution of and income from fisheries is now fairly well conducted. These figures help ministers to know their sector.

However, the most characteristic and remarkable feature in the gathering of fisheries information is probably the assessment of the fisheries resources which, in all the countries visited, claims the greater part of public research. These data are gathered to allow the authorities to manage resources on a scientific basis: resource observatories are seen as a component of sustainability policies.<sup>65</sup>

Nevertheless, if not supported by a strong political will, scientific research can be but an illusion for administrative action. Considering how data are used in the western Mediterranean, we must recognize that the information gathered does not automatically lead to management decisions. Experience shows that the latter are more often the result of socio-economic considerations of the moment and relationships of power, rather than scientific considerations. This is probably because it is difficult to deal with the problems of distribution of wealth among the various actors.

The information on developments in fisheries resources only implicitly involves the relevant authorities – they act more often to sound the alarm than as a means for decisions to be taken.

By comparison, the information on mariners and the companies they work for are much less readily available and more disparate. It would seem that the use of these figures is not considered a priority in the stock of information needed by policy-makers.<sup>66</sup>

### 6.2.3 *Producing policing standards and economic interventions*

For the public servants responsible for marine fisheries, the framework for the policing of fisheries is to “enact rules which establish a context for the universal right to fish, and to prevent abuse thereof”. Administrations must therefore be expressly enabled by law to enact bans that contravene the principle of *mare liberum*.<sup>67</sup>

It should first be noted that fisheries police represent only one of the various forms of policing exercised by the state over the sea. There are many others, such as the policing of shipping, the status of mariners, the environment, ports, maritime trade, customs, safety at sea, piracy and drug trafficking, maritime borders, state property and urban

<sup>65</sup> The Spanish Institute of Oceanography, in its 1997 activity report, defines its mission as “... to know the state of stocks (...) to indicate to the administration measures aimed at the rational exploitation of renewable resources ...”.

<sup>66</sup> In Italy’s last three-year plan, spending on public social science research represented approximately 2 percent of research funds for fisheries and aquaculture; this is one of the best rates in the region.

<sup>67</sup> The example in Morocco of the *dahir* laying down Law No. 1-73-255 of 23 November 1973, “forming the rules for marine fisheries”, constitutes a legal basis for intervention by the administration. In France, the statutory order of 9 January 1852 forms this legal basis (modified notably in 1992 and 1997); in Italy, Law 963 of 14 July 1965; in Malta, the Law of 27 July 1953 (modified in 1979).

planning. The policing of fisheries is not always a priority and is often considered by the control services to be of lesser importance than the control of maritime borders.

*Administrative control of the population and economic activity*

This is fundamentally a matter of controlling professional demography by means of the status accorded to fishers and vessels. Formally, the profession is policed throughout the region according to the “administrative policing” procedure. This is a unilateral and centralized procedure that consists in enabling the government and the administrative departments to control the profession. In this legal context, the centralized administration is empowered to ban or to authorize many decisions of fishing companies on an individual basis. Today, the tendency in some countries of the region is towards restricting this population<sup>68</sup> through, among others:

- the registration of fisheries, their vessels and the conditions imposed for fishing;
- the registration of boats and their movements, and control of fishing roles;
- permits to exercise the profession and allocation of licences;
- technical checks on boats and restrictions on their engine horsepower;
- controls on state-regulated concessions.

It is also a matter of economic intervention through controls on investment and public infrastructure, such as:

- controls on investments and new ship building;
- assistance in modernizing fishing methods;
- encouragement of related activities to add value to products;<sup>69</sup>
- decisions on public investment and the building of infrastructure;
- funding of the operating deficits of selected fishing companies.<sup>70</sup>

This is financial interventionism, which consists of using public budgets or regulating investments according to a policy guideline. The rules for the allocation of assistance are drawn up at central level, in application of the principles identified in the drafting of the fisheries plans.<sup>71</sup>

The deconcentrated administrations have the task of proposing and providing local actors with a framework for action and they check the use of the means provided at the central level. It should be noted that local authorities are increasingly involved in economic interventionism in fisheries; the regions, regional governments, the *generalitates* and the *wilayas* are all playing an increasing role in investment and assistance to fishing companies.<sup>72</sup>

During the industrialization phase, this interventionism worked to the advantage of the large companies, which benefited from subsidies and public infrastructure. Financial interventionism today is attempting to integrate the dimension of sustainability by modifying its priorities. Hence, in the context of the European Union, “modernization”

<sup>68</sup> In France, for instance, despite the demographic crisis in small-scale fisheries, the allocation of new fishing permits has been practically frozen. In Tunisia, a study of the villages in the Gulf of Gabès shows a severe decline in the population of small-scale fishers. A programme to encourage them has just been initiated and the number of permits for seiners and trawlers is to be limited. In Morocco, there was a decline from 3 500 to 2 500 between 1985 and 1998 in the number of sailors in the Al Hoceima zone.

<sup>69</sup> An increasingly important budget line in government and regional projects: the labelling policy and improvement of agrifood products (France in regions, Italy in the three-year plan).

<sup>70</sup> Subsidies on fuel and payment of social contributions in France during summer 2001; bonuses for studies and investment, and an additional bonus under the Tunisian investment code (Law of 27 December 1993), etc.

<sup>71</sup> There is a double centralism in Europe, since the member states, in their national regulations, apply guidelines set by the European Union, which are then reflected in national instructions at the deconcentrated level.

<sup>72</sup> Specialized services have been set up for this purpose. For example, the Centre d'étude et de promotion des activités lagunaires et maritimes (CEPRALMAR) in Languedoc, the ministry responsible for fisheries in Sicily, and the services of the *Generalitat* of Catalonia under the Ministry of Agriculture draft real fisheries policies in their regional plans.

is no longer on the agenda.<sup>73</sup> In Tunisia, the investment code uses financial incentives to attempt to bring new life to small coastal fisheries.<sup>74</sup> In Morocco, collective investment in small fisheries translates into the so-called “fishers’ villages” policy: this provides well-targeted collective infrastructure for small-scale fisheries.

#### *Controlling fisheries operations*

It is then a matter of controlling fisheries operations, by banning certain practices. This administrative policing of fisheries covers regulation and control operations, such as:

- regulation of fishing periods (biological resting period, etc.);
- regulation of zones (particularly the zone of several nautical miles within which trawlers and seiners are banned);
- banning and regulation of gear (mesh, rigging, size, etc.);
- control of supply (market size, food sanitation, etc.).

In the content of its provisions, this policing has little to do with the discipline of community fishing, described above as far-reaching regulations. The state-enforced policing of fisheries operations is primarily designed for semi-industrial fisheries – it consists of a series of very general and disjointed bans and is poorly adapted to a territorial concept of environmental management. This is true of the very general ban on some dragnets and driftnets, which shows no awareness of fishing territories or calendars. These examples emphasize the impossibility of managing fishing activities at too centralized a level, other than on the basis of what must inevitably be fairly simplistic algorithms.<sup>75</sup>

In legal terms, any non-respect of bans on fishing operations is a crime and hence calls for legal controls according to criminal procedure. In practice, the application of a repressive policy is an extremely delicate matter. In addition to their cost and impracticality, repressive policies are ill adapted to small-scale fisheries. And, in particular, repression by state services has the negative consequence of taking responsibility away from the communities and members of the profession. Controlling fishing activities (the law and respect for the law) is no longer a matter for the fishers as a group, but for the state, i.e. for nobody, since the public servants responsible for controls are not always the people most concerned about the future of the natural environment.

Hence the definition of crimes and special economic policing is largely related to the development of semi-industrial fisheries; the aim is not to control coastal fisheries. The latter seem, on the whole, to be marginalized in the control process. Most of the policing systems tend moreover to be legally repressive, bureaucratic and centralized. However, this authoritarian vision is relative, since few administrations today are capable of seriously restricting the fishing activities of semi-industrial units.

Furthermore, this special policing is linked to a technical and/or scientific administration responsible for developing and applying technical regulations. These administrations are also the main source of information for the political, and particularly ministerial, authorities.<sup>76</sup>

To sum up, there is a high degree of state interventionism in the fisheries sector, through both its supervisory controls over mariners and its policing powers,

<sup>73</sup> cf. for example, the Commission’s “Green paper”, the Italian three-year plan and the freeze on productive investment in France, with the exception of investment in safety aspects.

<sup>74</sup> Investment incentive code of the Law of 27 December 1993. The introduction of coastal fishing activities is being encouraged for the benefit of fishers and sons of fishers (funding of microprojects by individuals), and in some zones “with inadequately exploited resources” (basically the northern zone).

<sup>75</sup> For example, centralized measures banning some generic practices across Europe, as has been done for driftnets, when the size, rigging or period of use could have been regulated, case by case, for each fishing territory. This is a sad illustration of the application of the principle of subsidiarity.

<sup>76</sup> The situation is similar in other sectors: agriculture, health, the control of fraud in trade, veterinary policing, environmental policing, and policing the extractive or processing industries (Féral, 1996).

corresponding to an interventionism that has its roots in the sixteenth century. This form of interventionism has, over the last four or five decades, been complemented by economic interventionism. The result of this is individualized assistance to industrial enterprises and the provision of infrastructure. It is also behind the intervention of the scientific administration responsible for gathering information. Although it has been fairly easy to build up industrial fisheries in the Mediterranean over the last 30 years, the problem now is how to reduce excess fishing capacity. This reduction affects the whole sector: fisheries and related sectors, and the administrations themselves, which are finding it difficult to adapt to a new political paradigm.

# The administrative and professional institutions of maritime fisheries

Although there are most certainly differences among them, the administrations of the countries involved in the marine fisheries sector in the Mediterranean today also have many similarities. A major fact is that, in all the countries concerned, even where regionalization has occurred, fisheries are, and remain, the affair of the central state and even of a “super state”, if we consider the European Union. This state regulation of the sector is particularly remarkable in that, as we have seen, the social organization of fisheries in the Mediterranean has occurred around very close and localized groups and fisheries territories.

Professional institutions are particularly numerous in the western Mediterranean, but their many different functions merit methodical clarification.

## SECTION 7. THE IMPORTANCE OF THE STATE ADMINISTRATION

In comparison with services, and particularly tourism, the marine fisheries sector seems marginal to the economy. It is, however, a relatively “overadministered” sector, particularly at national level, by the administrations of the various states.

The apparent state protagonism and overadministration of the fisheries sector are not only the consequence of economic interventionism, which is relatively recent. They have their roots in the strategic importance of the sea and its resultant legal status. The sea is a border, a public space, an area of passage and communication, a military matter.<sup>77</sup> It is consequently because of their status as a maritime activity, much more than as an economic activity, that fisheries, the administrative supervision of boats and their activities, are governed by the state everywhere.

In all the countries concerned, the state has exclusive legal competence in the area of fisheries management. It has both a series of powers and the legitimacy to exercise these powers. The administrations thus set the rules for fisheries management, guarantee the rights of the various actors in the sector and control the application of decisions.

The fisheries administration, for its part, may be seen as an institution, a legal entity with the functions of regulation and control. In this respect, it is a legal construction, an organizational chart of services and a bureaucratic hierarchy. However, the administration is also a social entity, composed of individuals and legal persons. This group has legal, material and coercive means that allow it to benefit from bureaucratic and technocratic prerogatives over the whole fisheries sector.<sup>78</sup>

It is from these two points of view, legal and societal, that the fisheries administration in the Mediterranean may be analysed. In terms of its organizational setup, there are marked similarities among the administrations of the different countries of the western

<sup>77</sup> In France, this state regulation is illustrated by the famous Colbert marine ordinance of 1668, cf. Degage; on state regulation in Spain, cf. Alegret (1999).

<sup>78</sup> This group has produced the language, objectives and principles for the functioning and legitimacy of the state apparatus. Max Weber defines the administration as a “dominating group ... of a political nature, that is, guaranteed by a coercive apparatus ... and of an institutional nature which assures its monopoly of legitimate constraint”.

Mediterranean. In the north, this mimicry is a result of the symmetric construction of the great maritime and colonial nations; in the south, it is based on the transmission to the Maghreb countries of the European models of administration.

Several factors help to explain the overadministration of fisheries:

- the long-standing tradition of military supervision over mariners and their vessels;
- the creation of a scientific and technical administration that has been responsible since the 1950s for building up fisheries as a sector of the economy;
- an international institution responsible for promoting cooperation in fisheries management on the high seas and coordinating activities likely to affect adjacent stocks;
- the recent interest of the economic and regional administrations in this sector of the economy.

### **7.1 The international fisheries administration**

In the Mediterranean, there are two regional institutional arrangements responsible for fisheries management. This does not, however, reduce the inescapable role of the coastal states which, because of their sovereignty, remain both institutionally responsible for, and the subjects of, regional fisheries policies and their management.

State control has increased continuously over recent years. Moreover, through international administrations, the responsibility of member states has been extended to zones adjacent to their territories and they manage, on both a bilateral and a multilateral basis, all the straddling stocks and those in the high seas. The states are responsible in this way for the results and content of the measures taken towards the responsible management of areas and resources under their jurisdiction; they also act as interlocutors in adopting bilateral, multilateral or general international measures on the exploitation, sharing and protection of fisheries resources. It is, in particular, a vessel's flag state that is responsible for ensuring the implementation of international regulations concerning that vessel.

In the Mediterranean, the General Fisheries Commission for the Mediterranean (GFCM) was set up in 1949 under the aegis of FAO to deal with all issues related to fisheries management and the development of aquaculture. All the coastal countries in the region are members, together with the European Community and Japan. The International Commission for the Conservation of Atlantic Tunas (ICCAT) is also responsible for the specific management of the exploitation of large pelagic fish in the Mediterranean.<sup>79</sup> Nevertheless, many Mediterranean coastal states are not yet members of ICCAT.

These two institutions have made possible many exchanges of information and a greater exchange of ideas and opinions among the states concerned. They also cooperate closely and have managed to foster the development of new concepts and the adoption of common principles and measures. All this has made it possible to improve and develop the legal framework for fisheries management. Through their constitution and specialization, these institutions provide states with a forum and a framework for negotiation towards the sustainable management of their resources. It was the GFCM that coordinated the gathering and dissemination of scientific information on the resources of the Mediterranean and promoted formalizing common rules on fisheries. In the case of the GFCM, an opening towards participation by representatives of the professional organizations in its work should also be noted.

Fisheries are therefore evolving in a sensitive area of state control, and in the context of international competition modulated by diplomatic cooperation. The effect of this context is that most decisions concerning fisheries are taken at a very high level, a level that may sometimes appear disproportionate to the relative economic importance of the sector.

<sup>79</sup> On the GFCM see, in particular, Kambona (2001) and Tavarès de Pinho (1992); on ICCAT, Manteca Valdelande (2000).

## 7.2 The similarity among the different national administrative apparatuses

In order to be able to formulate and implement policy guidelines, the Mediterranean states today each have a “ministerial apparatus” whose organization, characteristics and content are very similar. The term refers to “the political and administrative authority entrusted by the executive authorities with the mission of defining and implementing fisheries policies”. This means that fisheries are on the agenda of the public authorities as a public policy. However, it must be remembered that a ministerial function has only very recently been established for fisheries. Up until the middle of the twentieth century, fisheries were not considered to be an economic sector, in the strict sense of the term.

In whatever way their mission is defined, ministers are the delegated organs of government. Legally, they act as representatives of the executive authorities in the area of fisheries. However, missions allocated to the ministers are always accompanied by legal competence, which is allocated by acts of legislation or regulation. These missions consist of representation of the state in the fisheries sector, the production of legal standards applicable to the fisheries sector and supervision of the administrative services responsible for fisheries.

With the recent exceptions of Morocco and Algeria, these missions are not fulfilled by a Minister of Fisheries and constituted as a specialized ministerial department. At present in the Mediterranean it is generally the Ministers of Agriculture who are responsible for fisheries. Throughout history, fisheries have been placed under different departments, depending on political representation. For many years in France, for example, fisheries came under the Ministry of Transport, which had overall responsibility for the merchant navy and maritime affairs. The shipping aspect was considered to be more important than the economic aspect; the fact that France and Italy have recently transferred fisheries to the same ministry as agriculture is significant.

Fisheries policies are in fact most often the responsibility of several ministerial departments that share various functions. The Ministries of Agriculture, Transport, Environment and the Economy are variously involved in these policies in their supervision of segments of activities or goods: control of the market, shipyards, transport, the legal system governing companies and the tax system, the maritime social system, sea product quality control, shipping and ship control, public goods, equipment necessary for production and the market, and so on.

The large number of administrations involved does not promote unity of action or clarity within fisheries policy but this phenomenon, which is not unusual in the area of economic intervention, is not unique to the Mediterranean.

### 7.2.1 Central departments responsible for marine fisheries

Specialized apparatuses to provide guidance and expertise were set up in the Mediterranean to serve the ministers responsible for fisheries and, as in all other sectors, these have been strengthened in recent decades. They can be defined as bureaucratic hierarchies, made responsible by the government for the administration of fisheries. They organize the supervision of the fisheries economic sector. They also provide the bases for and give form to the government’s decisions concerning the sector. The political influence of the bureaucrats and technocrats comes primarily from their legal and scientific legitimacy. However, this is often backed up by the feeling of solidarity between the technical and staff corps in the various services. This may lead to conformism in the public service, and the establishment of international networks that use the same language and have the same representations of policy.<sup>80</sup>

<sup>80</sup> cf. Chevallier and Loschak on this phenomenon. Terms are defined as follows. Bureaucracy is the politico-administrative system based on hierarchical decision-making mechanisms and dominated by the social group of administrators (Crozier, 1963). Technocracy is the politico-administrative system based on expert decision-making mechanisms and dominated by the social group of scientists and technicians (Comte).

The technical and administrative competence for the sector is located at central level. Trained staff gather and process the information needed for the minister to take decisions, give form to these decisions, implement instructions and impart appropriate orders to the different services.

In the Mediterranean, the tradition of a centralized administration generally allocates the fisheries sector to one of two types of administration:

- a traditional administration that originally controlled maritime shipping, where the aspects of “fisheries policing” tend to be preponderant (e.g. Morocco, France, Spain and Tunisia);
- an administration that functions on the principles of the development of the agriculture sector and tends to emphasize socio-economic aspects and responsible fisheries management (e.g. Italy and Malta).

These two categories of administration were originally run by two different bodies of public servants, and signs of the two different administrative cultures can be seen. Today, however, these administrations tend to cohabit and coordinate their approach.

### 7.2.2 *The scientific fisheries administration*

Public scientific research is now a fundamental element in fisheries policies, even though it is still difficult to determine its operational effectiveness in government decision-making. It accounts for a significant share of budgets allocated, and has permanent use of administrative means. All the countries of the western Mediterranean have national fisheries research centres.

The major part of public research in fisheries is devoted to marine biology. During the industrialization of fisheries, the Mediterranean states set up structures to gather scientific information on fisheries resources. Their function is also to promote the exploitation of these resources through the dissemination of industrial production techniques, on the basis of the productivist model well known in agriculture. These administrations are used today to design and implement the monitoring of fisheries management measures.

In most cases, the administrations enjoy the legal status of an establishment, which gives them a certain degree of autonomy.<sup>81</sup> At international level, they are encouraged to set up expert networks and establish objective bases for fisheries management.<sup>82</sup> These administrations have the scientific means to assess the state of resources, such as laboratories and oceanographic vessels, which makes them the main scientific tool available to assist the state apparatus in policy decision-making.

However, in historical terms, this scientific apparatus is relatively recent. In the northern countries, it was set up just before the Second World War, but with a “hard” scientific mission. From the 1970s onwards, this mission took on a more economic aspect. However, only Italy now has a specialized social science fisheries institution. In the countries of the Maghreb, these establishments were set up by the state after decolonization, and form part of the wish of these countries for development and emancipation.

## 7.3 The complex nature and abundance of the deconcentrated administration

Deconcentration is a way for the state to deploy its policies. A distinction must be made between deconcentration and decentralization. The latter is a system for the

<sup>81</sup> These scientific administrations have autonomous status and their titles are based on those of university establishments: institutes, laboratories, agencies, research centres, etc. However, their functions are basically to collect biological information and to promote industrial fisheries production techniques. The *Code of Conduct for Responsible Fisheries* (art. 12) recommends that these services have the appropriate status and means to fulfil their mission.

<sup>82</sup> cf. articles 7.4 and 7.5 of the *Code of Conduct for Responsible Fisheries*.

administration of civil society that ensures representation of interests distinct from those of the state.

In the context of deconcentration, the central fisheries administrations have specialized administrative bodies responsible for implementing central policy. In order to do this, their mission is to represent the ministries and execute instructions aimed at the implementation of fisheries policies. All these “bodies delegated to implement all or part of public fisheries policies” form the deconcentrated state administration.<sup>83</sup>

### 7.3.1 *The deconcentrated territorial fisheries administration*

Territorial deconcentration is the instrument for spatial redeployment of the central state. Delegated public servants represent the central administration at several levels of deconcentrated territorial districts.

These levels are generally merged with the overall administration of the country (regions, provinces, governorates) but, unfortunately, they do not necessarily coincide with the territories in which fisheries management units<sup>84</sup> should be based. The port district is the exception to this, since it may be a relevant criterion in determining the group responsible for fisheries management.

The administrative officials of these districts are responsible for certain hierarchical tasks that will be considered below, while field officers provide information and act as relays for the maritime populations. The case of Tunisia is a good example, where a low-level state officer is stationed in practically every community; the officer informs the hierarchy of the fisheries situation and is familiar with the communities. He or she is also a source of precious information for fishers and always available to help them.

These functions may, however, be split among several ministries at local level, and the users often have to work with several administrative interlocutors. Generally, policing is separated from production, the status of vessels and individuals, economic intervention and product controls.<sup>85</sup>

### 7.3.2 *The deconcentrated specialized fisheries administration*

For 30 or 40 years, specialized establishments have been created to conduct administrative functions for and on behalf of the state. In this case, state representation has no territorial base but is sectoral or segmentary. These relay bodies established by the law are institutionalized as deconcentrated administrations. For example:

- the creation of national research centres;
- the creation of a district centre in Nador, Morocco;
- the creation of an autonomous establishment for the management of small-scale ports (in Tunisia, at Al Attaya and Chebââ);
- the creation of a fishers’ training college in Sète, France;
- the establishment of an administrative centre for the extension of fisheries techniques in Catania, Italy.

The state has also appointed individuals or public persons responsible for certain technical missions; this is the delegation of public services or services of general interest, through the allocation of subsidies or public contracts.

<sup>83</sup> cf. the Regional Commission for Agriculture in Tunisia which is responsible, among others, for all agricultural issues in the regions. In Morocco, it is the Department of Maritime Affairs that deals with maritime fisheries in the field, although it answers directly to the Governor. In France, the Maritime Affairs Department (which comes under the Ministry of Transport) acts as the external service of the Ministry of Agriculture for issues related to maritime fisheries – a situation that does not promote clarity.

<sup>84</sup> Such as the case of France, with regional districts, *départements* and *communes* which, for reasons of overall administrative standardization, are substituted for the “maritime quarters” and “maritime stations”, the original division of which corresponded to maritime urban areas and maritime activities.

<sup>85</sup> The maritime affairs service, agriculture services, health services, etc.

- Chambers of commerce, cooperatives or *cofradías* are generally responsible for the construction and management of fish auction markets.<sup>86</sup>
- Financial establishments are given subsidies to grant loans and promote maritime investment (*Crédit maritime* in France, regional banks in Spain, cooperatives in Italy).
- Universities, often under the leadership of fisheries administration research centres, are responsible for research into marine resources or on the sector.<sup>87</sup>
- Non-governmental organizations and cooperatives are funded to organize training, also for fishers' wives, in commercial management techniques, or are given subsidies to conduct training and provide assistance to small-scale businesses, or to establish collective transport services.
- Interprofessional structures are encouraged to promote fisheries products (e.g. Tunisia, Italy).
- Consular structures are funded by the state to organize national and regional representation of the profession (Chamber of Fisheries in Morocco, and soon also in Algeria).
- Management and coordination committees are funded by the state to impose discipline on the profession (Italy).
- International organizations (such as FAO) are responsible for providing technical assistance under programmes and projects.

This list is far from exhaustive; it shows the “depth” of the fisheries administration in the broadest sense, and the need for policy coordination. It also shows the entanglement of the state apparatus with civil society which, throughout the Mediterranean, is a very complex and interventionist administrative system.

## SECTION 8. THE AMBIVALENCE OF THE PROFESSIONAL INSTITUTIONS

The professional institutions in the Mediterranean fisheries sector are of considerable importance but it is not always easy to determine their function with regard to fisheries policies. The western Mediterranean offers a rich typology of different bodies, the roles of which we shall try to elucidate with reference to our overall subject.

### 8.1 The place of professional institutions in fisheries policies

In contrast to the liberal interpretation of economics, businesses are not alone against the state. In the western Mediterranean, there are many professional institutions whose functions may sometimes appear to be rather enigmatic.

#### 8.1.1 *The professional institutionalization of the marine fisheries sector*

Very generally, the institutions are “bodies responsible for conducting certain functions for and on behalf of groups of interests which, in order to do this, mobilize legal and material means”. In brief, they are a framework for collective action, they carry out functions on behalf of an interest group and have a minimum of means so to do.

The institutions thus organize collective action in various forms. Within this context, the fisheries professional organizations in the Mediterranean are part of a movement of technical decentralization, defined as “the recognition by the state apparatus of non-state interests and organization”. This reflects the administrative autonomy of a group of persons to defend, define, manage and represent their sectional interests.

- Constitutionally, it is a group of stakeholders recognized as legitimate by the central authorities.
- In functional terms, the concept covers what, in the Anglo-Saxon countries, is known as self-government.

<sup>86</sup> In France, for example, at Sète, Grau du Roi, Port la Nouvelle and Port Vendres.

<sup>87</sup> In Italy, France and Spain and in Morocco through the Hassan II Agronomic and Veterinary Institute.

The administrative organization of fisheries illustrates this definition. The civil professional institutions “recognized as legitimate” take part in defining and implementing fisheries policies.

We therefore talk of professional institutions when we are dealing with a body whose representation is related to all or part of one or several professions, and the function of which is related to the management or representation of that professional group.

In fact, all sectors of the economy are affected by this phenomenon, which involves the economic actors grouping together to exercise collective missions related and complementary to state initiatives. The area of fisheries is no exception in that professional bodies have long existed, but the institutions involved in fisheries policy have multiplied in recent years.

- The actors in the sector have created many representative and managerial structures, such as consortia, professional unions, cooperatives, professional and specialized associations.
- The states in the region have called on the professionals to organize themselves and have set up many professional-type bodies, such as cooperatives,<sup>88</sup> agencies, fisheries committees,<sup>89</sup> maritime chambers and fishers’ villages.<sup>90</sup>

However, there have long been professional institutions in the western Mediterranean that have originated from the communities themselves, and are organized in the form of “trade corporations”, such as the following.

- The French fishers’ *prud’homies*, under a Second Empire text, were purely and simply included in the deconcentrated administration of the navy as “communities responsible for avoiding conflict among fishers”. Specifically, they are bodies responsible for professional discipline, based on the model of the corporations of the *Ancien régime*.<sup>91</sup>
- The Spanish *cofradías de pescadores* are defined as “corporations under public law which act as consultative bodies and collaborate with the administration”; there is therefore much less emphasis on their corporate and self-disciplinary nature.<sup>92</sup>

This shows that the professional institutions do not originate exclusively from groups, but may be strongly encouraged by the state administration. The latter hopes to use these bodies to achieve its own objectives. This is the ambiguity of professional organizations, since they both represent the professionals and act as the instrument of the state in promoting its own objectives.<sup>93</sup>

### 8.1.2 How can the professional institutions be analysed?

Of course, not all institutions are the same and they may be interpreted differently depending upon whether the analysis is legal, political or historical. All professional organizations claim to be involved in the fisheries sector and have influence in the field of administrative and political decision-making. In the context of sustainable fisheries

<sup>88</sup> Kerkennah in Tunisia, Cala Iris in Morocco.

<sup>89</sup> *Ex nihilo* creation of this structure in a 1945 edict.

<sup>90</sup> Created in Morocco over the last ten years.

<sup>91</sup> Statutory order of 19 November 1859 creating the fisheries police in the 5<sup>th</sup> maritime *arrondissement*. In France, the *prud’homies* exist only in the Mediterranean.

<sup>92</sup> The *real decreto* of 11 March 1978 which revives old provisions. Relations with the Spanish state have always been complex and the *cofradías*, which also exist on the Atlantic coast of Spain, have been banned and then re-established several times by decree. See, on this point, the legal dictionary of fisheries, *Cofradías de pescadores y sus federaciones*, p. 751–760, and the work of Alegret (1999) who, after analysing their history, notes that the *cofradías* can no longer be considered as corporations, but rather as trade union organizations.

<sup>93</sup> In legal terms, these bodies may be considered as both corporations and foundations; they are both “founded” by the state to fulfil a deconcentrated mission of general interest, and the expression of a “body of categorial interests” to carry out decentralized functions (cf. on these concepts Féral, 2000).

management, it is important that the place and role of these various institutions<sup>94</sup> be properly understood.

We should first look at the professional fisheries institutions with respect to three fundamental questions.

- The constituent group: on which group interests is the institution based?
- The social aim: what is its main purpose?
- Powers of internal discipline: what are the legal capacities and/or administrative competence?

Other aspects may then be added to these three initial questions.

- The origin and history of the institution.
- The true representativeness, composition and actual dynamism of the institution and its leaders.
- A study of its links with other institutions, such as the state.
- Its geographic area and the administrative district in which it works.
- The legal system, its constitution, internal rules and regulations, and its democratic representativeness.
- The legal and regulatory framework, and its capacity to discipline its founders and members.

As can be seen, the area of investigation is vast, yet all the questions above could form a methodological path for future institutional analyses.

## **8.2 The functions of the professional institutions**

The various professional fisheries institutions in the Mediterranean can therefore be classified according to their different collective functions. A functional interpretation will make it easier to understand the various structures encountered during this study such as representation, negotiation and comanagement, professional discipline, management and the provision of collective services.

### ***8.2.1 The function of representation***

In forming interest groups, the various professional groups have the aim of personalizing and individualizing their group interests. This involves establishing a body for collective representation, the function of which is to express itself on behalf of all the members of the group. It should present its demands, define its objectives and express the common opinions of the group.

This function of representation is necessary to the “outside”, to give legitimacy to the places and institutions of decision-making with respect to fisheries. The acquisition of a legal personality makes it possible to exercise such a function.

“Internally”, the body for representation must build up its representativeness. It must bring together as many members as possible, and unify their demands without creating any internal conflict. This is always difficult, since professionals in such an organization also compete with each other as individuals.

However, the issue of representativeness in fisheries is not always very clear. Representation does not lie only in legal constitutions but is based on the dynamism of the groups that create the various institutions, and on decisive recognition by the state.<sup>95</sup>

Very often, for instance, shipowners claim to represent the “fishers”, and this inevitably blurs the real representation of the profession, which consists primarily of sailors. Equally, there is no proper representation of “communities” in our sample group; however, this should not be confused with representation of a “profession”, since it adds its own territorial and collective dimension. Sometimes the state imposes

<sup>94</sup> Article 7.1.2 of the Code of Conduct recommends that the states “identify relevant domestic parties having a legitimate interest in the use and management of fisheries resources”.

<sup>95</sup> In Italy, for instance, the cooperatives have a basic role of representation. With identical constitutions, this is a marginal function of similar organizations in France, Tunisia and Morocco.

trade union representativeness, which sets “legal” against real representativeness, or “skipper/sailor” splits, linked to a form of fishing exploitation.

Finally, there must be a reason for representation: why represent? In many hypotheses, management bodies, cooperatives, interprofession action groups and professional chambers all claim to represent all or part of the profession; in reality, they should claim to represent only what is in their mandate.

#### *Forms of group representation according to the semi-industrial logic*

In the Mediterranean there are professional unions of skippers and of sailors. Their specific status often gives them legal recognition and automatically allows them to sit on decision-making bodies.<sup>96</sup> The problems of ensuring the representation of individual businesses in this specific context cannot be hidden; the weight of the large commercial companies often imposes them as a model, making it difficult to negotiate with the people who actually manage fisheries.<sup>97</sup>

In Morocco, the status of professional unions is still unclear, and it is difficult for such organizations to obtain authorization. In this case, an association acts as the institution for professional representation. A non-profit-making association<sup>98</sup> is the legal status generally recognized by the public authorities, since it makes it possible to acquire a legal personality.<sup>99</sup>

These are contemporary, rather than community, forms of representation, based on the idea of the subsector and the social order. Very often, associations and unions are organized by trade (trawlers, seiners, etc.) or refer to the skipper/sailor split, or include different trades in the subsector such as fish vendors, ship builders, services, riggers and sailors.

In Italy, the cooperatives now also have the main role of representing professional interests, and are becoming involved in the area of negotiation and political policy-making.

#### *Corporate representation*

Associations, cooperatives and unions are all “modern” forms of representation, based on individual voluntary participation. The skippers’ *prud’homies* in France and the *cofradias* in Spain were established on the model of trade corporations. These, then, are professional corporate orders with the compulsory membership of all fishers. Shipowners, skippers and sailors all sit on the *cofradias*, even though the shipowners almost completely dominate the institution.<sup>100</sup> In the French *prud’homies*, skippers have to be members, while sailors are excluded.

The main function of *cofradias* and *prud’homies* is not to represent fishers as a group. However, it should be noted that, in Spain, the *cofradias* do outstandingly assume this function, while the *prud’homies*, which are fragmented, are not really recognized by the authorities. The *prud’homies* represent more a “localized community” than a profession, which perhaps explains their weakness in the modern social field. The *cofradias* are organized in federations, which gives them weight at regional and national level. The *prud’homies*, on the other hand, are not organized in any form of network.

<sup>96</sup> For example, on the fisheries committees in France, on the *cofradias* in Spain and on ministerial bodies in Tunisia.

<sup>97</sup> It is found that shipowners end up representing the “fishers”, who are defined as “the individuals who engage in the action of fisheries”, since the skipper is not necessarily the owner of the boat, but the one who “orders fisheries operations”. With this confusion between the two concepts, small-scale fisheries are *de facto* deprived of representation, for example, in Morocco, Tunisia and France.

<sup>98</sup> Often curiously called a non-governmental organization, which has little legal or institutional meaning. They are also called “public interest foundations” or not-for-profit institutions.

<sup>99</sup> This recognition may be subject to accreditation procedures by the authorities, which increases the legal legitimacy of the association, but not its corporate legitimacy. This is the case in Morocco, where associations are subject to an authorization procedure.

<sup>100</sup> cf. on this situation, Alegret (1997).

In terms of representation, we find the old split in fisheries organization between trade unionism and corporatism. In France, the latter is unquestionably of a community nature, whereas the infiltration of the *cofradías* by the shipowners and their supra-organization has probably removed their community roots.

### 8.2.2 *The function of negotiation and comanagement*

The objective of the professional institutions is to penetrate the political decision-making circle so as to participate in fisheries management in order to serve their own categorial interests. Under pressure from the representative institutions, coastal states have been induced to set up institutions for negotiation and comanagement in the fisheries sector. The aim of these institutions is to bring together the points of view of the various pressure groups and to come to decisions through discussion and consensus-seeking. The institutions authorized to sit on negotiating and comanagement bodies are selected by the state according to its objectives and representation schemes.

The prototype of these institutions in France, for example, is the “fisheries committee”, an interprofessional structure in which all actors in the fisheries subsector are represented, even though the shipowners’ group has taken over the effective management of the institution.<sup>101</sup> Together with the administration, the local or regional committees are consulted on policy decisions concerning fishing and incentives in the sector. Representatives are chosen by trade union elections. Local committees have recently begun to play a role in the allocation of fishing licences to small-scale fisheries.

The *prud’homies* still fulfil this function of negotiation and comanagement, but the narrowness of their jurisdiction, the few means available to them and their absence from the mainstream exclude them from local negotiations with the deconcentrated state bodies or the decentralized territorial authorities. They have no weight in general policy decisions.

In Italy, the cooperatives are interlocutors of the public authorities, in the framework of interministerial bodies. They take an active part in drafting laws and in the formulation of guidelines for fisheries. The same is true in Malta, where the cooperatives and fishers’ associations are involved in drafting fisheries legislation.

In Spain, the *cofradías* are the interlocutors of the state and the *generalitates*, basically on behalf of boat owners; they recently participated extensively in the decision to set up a resource protection zone in the Spanish Mediterranean.<sup>102</sup>

In Tunisia, the fishers’ associations are organized by *métiers*: seiners, trawlers and small coastal fisheries. Shipowners in the larger *métiers* also dominate representation and negotiations on fisheries policy.<sup>103</sup>

Morocco recently set up maritime fisheries chambers, with the aim of ensuring national representation for economic operators in the marine fisheries sector. The explanation of the function of these fisheries chambers is, institutionally, not very clear. They were probably set up to act as a forum for fishers’ associations and to play the role of regional fisheries councils, responsible in particular for providing advice to policy-makers.

### 8.2.3 *The function of professional discipline*

This function is generally fulfilled by the fishers’ communities. However, all the institutions, even the non-community ones, naturally tend to exercise disciplinary

<sup>101</sup> The fisheries committees were set up in 1945 as an interprofessional board, on the model of class-based trade unionism.

<sup>102</sup> *Real decreto* 1315/1997 of 1 August 1997, “estableciendo una zona de protección pesquera en el mar Mediterráneo”, cf. Menedez Rexach (2000).

<sup>103</sup> It is almost impossible in Morocco and Tunisia to meet any “real” small-scale fishers who represent the communities.

powers over their members. These powers raise problems of definition that merit consideration.

#### *The complex nature of professional discipline*

In the corporate systems, disciplinary and organizational powers are in theory exercised only over the members of the professional group, thus establishing both its limits and its legitimacy. This therefore presupposes the definition of a constituency, a group and the competences of that group. Hence, either in accordance with legal provisions or informally, the professional institution exercises a regulatory function which may form part of the fisheries administrative structure. Within this disciplinary function, there are several secondary functions, i.e.:

- regulation, which involves establishing general, impersonal rules concerning fishing practices;
- jurisdiction, which itself consists of two functions (judging and punishing infractions of the fishing regulations) and arbitration (deciding in the case of disputes between members of the professional group);
- control, which involves verifying respect for professional standards.

#### *Exercising disciplinary powers in the Mediterranean*

Discipline, a natural function of both corporations and communities, is today exercised over certain groups of fishers through institutions whose managerial and representative role has altered.

#### *Community discipline*

Community discipline needs no formal institutions and is still discernible in certain fishers' villages. It is exercised by the head of the village or the person in charge of the fishers' community. This power is not always known or recognized by the public administration.<sup>104</sup> However, for the communities, it is clearly the most effective means of regulation and control. The corporation of *métiers* is the prototype institution for discipline in the community tradition and exists in several legal forms in the Mediterranean.

- In France, the skippers' *prud'homie* is the most developed model of professional discipline for small-scale fisheries. It fulfils all the disciplinary functions and is recognized as a professional corporate order by the public authorities.<sup>105</sup>
- *Cofradias* in Spain are also regulatory institutions based on this disciplinary model, but they focus mainly on market discipline and labour disputes between shipowners and sailors.
- In the Maghreb, there is no formal model, but there are practices related to the *hisba*, a community of small-scale fishers under the aegis of the *amin*.<sup>106</sup>

A feature of particular interest in traditional discipline, which is not found in non-community institutions, is that it effectively and thoroughly regulates the fishing effort of each fisher. The limited extent of community "jurisdiction" and the strong commitment of the group to its paternalist rules probably explain the relevance of this function at territorial level.

<sup>104</sup> In Tunisia, public servants working in the field in Kerkennah, Madhia and Chebâa are familiar with these mechanisms of self-discipline. However, the hierarchy is generally ignorant of the phenomenon. The same is true of Nador in Morocco where, in general, the administration considers the fishers to be a group with no form of control. However, it is well known that the *cofradias* governed lagoon fisheries until 1956 and that, originally, two tribes alone controlled the banks of the lagoon.

<sup>105</sup> Much research has been conducted on this institution, which has bases in more than 40 communities. It can be traced back without interruption to the twelfth century and has extensive written archives, which is exceptional for a community phenomenon.

<sup>106</sup> The institution of the *hisba* was restored in Morocco by a *dahir* in 1983, but was not extended to fishers' communities. It is a model of professional self-discipline which, by analogy, shows the modern applicability of the system.

*The emergence of disciplinary powers of non-corporate institutions*

Non-corporate institutions may gradually take on a function of professional discipline. As they veer towards autonomy, they begin to exercise an increasingly authoritarian role over their members. However, in contrast to the community situation, it is rare that these disciplinary powers extend to management of the fishing effort. They are generally used to consolidate the lobbying activities of the institutions. Some examples of non-corporatist discipline noted during our survey follows.

- The imperatives of representation veer towards discipline; this is the case of professional unions and non-profit-making associations that draw up “instructions” or “circulars” for their members.
- The function of service provider turns into regulatory powers, which is the case of cooperatives or business consortia in Italy.<sup>107</sup>
- Economic integration allows a professional to organize and structure the subsector. The commercial business of fish vendoring can thus control the production of a large number of small-scale fishers through shipowning and exclusive contracts.<sup>108</sup>

Under the law, or a public law contract, the state may give organizations or companies disciplinary powers to organize the fisheries sector or part of it. For example, the fisheries committees in France now hold real decision-making power. However, the most interesting cases are those of the fishers’ consortia and the lake fishers’ associations in Italy where they have won “managerial concessions” over fisheries territories; these clearly recall the community system.<sup>109</sup>

**8.2.4 The function of collective service provision**

In order to gain access to certain services, small-scale and individual enterprises in the Mediterranean often group together to set up institutions intended to provide collective services. These institutions may themselves set up collective service businesses with clearly identified tasks. The distinction between these and commercial businesses is that the distribution of power is based on people, rather than on capital.<sup>110</sup>

In the Mediterranean, the prototype of these institutions is the “service cooperative”, whose aim is to offer advantageous rates to groups of members for a particular operation such as fish auctioning, transport, fuel and equipment supplies, legal advice, bank loans and infrastructure management. The Italian system of business consortia also aims to provide common services, but is primarily designed to federate the means available.

There are also shipowners’ cooperatives, which were often encouraged by the state to build landing sites and bring together crews during the phase of the industrial development of fisheries.<sup>111</sup>

As part of their mission of authority, the *prud’homies* and *cofradias* also provide certain services in the areas of marketing, equipment maintenance, landing of ships, and the management of common buildings and infrastructure. However, these are only secondary to their main mission, which is primarily that of authority.

Finally, there are the “professional chambers”, which bring together all the professionals in private administration. These structures were set up and encouraged by

<sup>107</sup> The Italian cooperatives and business federations are strong service providers, which gives them an almost paternalistic authority, cf. the case of LEGAPESCA. The same trend can be seen in the shellfish farmers’ cooperatives in Languedoc and fishers’ wives cooperatives in Catalonia in Spain. However, this phenomenon is not found in Tunisia and still less in Morocco.

<sup>108</sup> In Morocco, Tunisia and Mauritania. Here the fish vendors are in fact clandestine owners or undeclared loan companies with a monopoly on the supply. In these conditions of economic dependence, the fishers’ group has only a limited capacity to adapt to the resource and the market.

<sup>109</sup> More particularly in the Veneto, for softshell clam fishing, and in Sicily, for small fisheries. There is also the case of the Latium lake fishers’ consortium.

<sup>110</sup> The cooperative institution is based on the principle of “one person, one vote”, whereas the distribution of power in commercial business is based on ownership of capital.

<sup>111</sup> cf. the cases of Tunisia and Morocco in the 1960s.

the public authorities as part of semi-industrial fisheries activities in the Mediterranean. Such corporate establishments are consequently able to provide collective services such as infrastructure management, training, legal advice and social aid. The chambers of *petits métiers* workers, chambers of commerce and industry, maritime chambers and interprofessional groups all form part of this category.

However, despite their name, it may be questioned whether the maritime fisheries chambers in Morocco are really “professional chambers”. With the exception of training, which is still at a rudimentary stage, no role of collective service provider or public service manager is clearly stated in the constitution or in the projects for these new institutions.

### 8.3 The lessons of the institutional analysis

This overview of the professional institutions in the western Mediterranean shows the profusion of institutions that have amassed in the sector throughout its history. The problem is to interpret their actual functions; the specialists themselves sometimes find it difficult to know exactly what a particular institution does. This is particularly the case with respect to functions that are not necessarily recorded in the constitution of the association; the content of tasks and actions may change according to place and time. A fishers’ association may become a union, or mutate into a professional chamber or a real corporation of *métiers*. This is why we have reported our actual observations.

#### 8.3.1 *The ambivalence of the institutions: territorial organizations or networks*

There seem to be two basic institutional frameworks. One is for the discipline of fisheries activities, which is related to territory, and the other is for the modernization of fisheries, which is related to networks.

- The efficiency of the functions to discipline and regulate the fishing effort can only be ensured if based on a territory, under the control of the professional group, with traditional regulations. This represents the community model.
- The efficiency of the modernizing function (establishment of capacity and provision of services) is related to the capacity to create links with the state apparatus. This represents the semi-industrial model.

The *prud’homies* and Italian consortia that enjoy the “delegation of resource management” come under the first category. However, the Italian consortia may work with cooperatives that open the way to modernization.

The *cofradias* have today been taken over by semi-industrial fisheries and cannot therefore be likened to *prud’homies* since they play practically no role in self-regulation of the fishing effort. However, they do have corporate powers that give them control of the markets and that, through the establishment of networks of influence, provide them with material means and influence over policy decisions.

Since they are new, the Moroccan fisheries chambers are still somewhat enigmatic. They function as a lobby, do not seem to have any control over the fishing effort and their service functions are still rudimentary. The same is true for the fishers’ associations in Tunisia. These are interlocutors for the authorities and, on that basis, enjoy advantages and means, but their capacity for discipline is limited. The villages, *douars* and fishers’ villages of the Maghreb are highly territorial but have no official status in the political field.

Clearly, the community system’s main function is to impose discipline on the fishing effort and to transmit knowledge. However, it is very limited in its capacities to participate in policy decisions and to mobilize means. In contrast, the institutions that are organized in networks are strong in expressing their demands and mobilizing means, but they have no territorial reference, nor any disciplinary capacity.

In the table, we have tried to give a succinct description of the results of the institutional analysis.

## Results of the institutional analysis, showing the functions of professional institutions

Functions	Prud'homies	Institutions Consortia (Italy) <sup>1</sup>	Cofradias	Chambers of fisheries	Fishers' associations
Nature and area of representation	Localist community	International federalist unionist	National corporatist	National unionist	National unionist
Institutional links with the state	Decentralized administration	Partnership, contracts, lobbying	Administration and lobbying	Administration and lobbying	Lobbying
Control of fishing effort <sup>2</sup>	Strong	Average	Weak	Non-existent	Non-existent
Territorial references	Strong	Average	Weak	Non-existent	Non-existent
Traditional culture	Strong	Average	Average	Non-existent	Non-existent
Openness to innovation	Weak	Average	Strong	Strong	Average
Constitution of networks	Non-existent <sup>3</sup>	Strong <sup>4</sup>	Strong	Average <sup>5</sup>	Average
Influence in policy-making	Non-existent	Strong	Strong	Strong	Strong
Mobilization of means	Non-existent	Strong	Strong	Average	Weak
Management of collective services	Weak	Strong	Average	Weak	Weak
Control of markets	Non-existent	Average	Strong	Weak	Weak

<sup>1</sup> There is no distinction between a consortium that holds a managerial concession and a cooperative in Italy. This situation cannot be compared with that of other cooperatives in the zone.

<sup>2</sup> The idea of discipline includes all the functions of regulation, arbitration, control and penalization.

<sup>3</sup> There are no federations of prud'homies and they are often alone in their constituency, while the cooperatives are involved in federations and even approved by a professional movement that is not restricted to fisheries, as with the Italian cooperative movement. This extraprofessional network is probably what makes the cooperatives strong.

<sup>4</sup> Emphasis should be put on the federalist organization of the cofradias and cooperatives; this is what makes them effective in their demands.

<sup>5</sup> The chambers have only recently been set up and their mission needs to be precisely defined.

### 8.3.2 The role of the state in recognizing the professional institutions

A number of points seem to show that the institutions are defined and develop on the basis of their relations with the state administration.

With the exception of the French fishers' *prud'homies*, which were formally recognized by the state in 1859, fishers' communities are not recognized as institutions. And even in the case of the *prud'homies*, it should be noted that they were then "integrated" into the navy administration, and today are discredited and excluded from fisheries policy. The various administrations generally ignore (and do not give legal recognition to) the societal organization of the fishers' villages, traditional knowledge, community territories, or village rules of discipline. These rules are, at the most, "tolerated" if they do not go against the development of semi-industrial fisheries.

In the management of semi-industrial fisheries, the state is often behind the creation of professional bodies: the fisheries committees, fisheries chambers and cooperatives. These, therefore, represent the state's wish to establish comanagerial links with the industrial fishers in order to organize the sector. However, it must be noted that these institutions do not have the capacity to control the profession or, in particular, to impose rules that would make it possible to control the fishing effort.

Semi-industrial fisheries may thus involve state intervention. This is intended to develop control policies and increasingly costly and sophisticated interventions: the regulation and control of the fishing effort of semi-industrial fisheries, participation in investment in ship building, funding for public scientific research in the area, public investment in land, etc. The state thus assists semi-industrial fisheries in terms of continuous financial and institutional contributions.

# Conclusions and prospects

The situation of community and semi-industrial fisheries in the Mediterranean expresses the relationship of power between two social categories and is a result of arbitration by the public authorities over recent years. This arbitration has arisen not from fixed concepts or deliberate policy but is a result of sociopolitical representations.

Today, the public authorities in the Mediterranean are confronted with a very real challenge as regards fisheries management, where the situation can be compared to the crisis facing the agricultural sector in the industrialized countries. Most of the countries concerned have inherited semi-industrial fleets that were built up from the 1960s onwards; it is these that, in many cases, are responsible for the overfishing of most fisheries stocks. This overfishing has drawn the states into an interventionist spiral of modernization, the effect of which has been both public and private overcapitalization.

Consequently, the current problem in the Mediterranean is not one of modernizing and increasing harvesting capacity, which already exceeds the renewal capability of the resources. It is rather a matter of controlling and regulating the fishing effort to a level of compatibility with the resource base.

In this context, the “virtues” of decentralized models of regulation have been rediscovered although they have existed within the fishers’ communities of the Mediterranean for centuries. Initiatives have started to appear which, at least partially, revive the principles on which communities were once established.

- In Morocco, the establishment of “fishers’ villages” has led to the creation of marine burghs around established infrastructure. The government is hoping to “settle” the fishers around such agglomerations, thus forming groups. In this experiment, the state has encouraged the creation of a cooperative that can help establish links among fishers. A marine burgh is thus a collective organization.<sup>112</sup>
- In Italy, the law allows the government, or local authorities, to allocate “management concessions” over actual fishing territories. Hence, the contract for a concession in fact validates a small-scale fishing territory and establishes the authority of the consortium over its members. It also makes it possible to legitimize a collective interest enforceable against third parties.<sup>113</sup>
- In Kerkennah, Tunisia, public servants are behind the creation of a cooperative that has the role of organizing the sale of products and participating in the management of *charfias*. The administration has also just awarded a fishers’ association the management of a dam lake, in the form of a concession.
- Several French *prud’homies* have submitted an application to their supervisory ministry for an integrated management programme, in which a small-scale fishing territory will be defined, protected and assigned to management by the small-scale fishers’ communities.

This institutionalization of territories and selected fishers’ groups probably indicates a re-evaluation of strategies for the control of fisheries areas and resources; sustainability, rather than modernization, is now the priority. However, it must be ascertained whether the public authorities are able to establish new policy guidelines

---

<sup>112</sup> The case of Cala Iris in Morocco.

<sup>113</sup> cf. also the consortia responsible for management of the Latium lakes in Italy.

and, particularly, to negotiate these with the actors in industrial fisheries. This would involve, in particular:

- initiating the gradual de-industrialization of certain parts of the fleet;
- including the semi-industrial fleets within a territorial policy, within which community rules of discipline would be enforceable;
- defining and recognizing the legal existence of fishers' communities;
- defining and protecting fishing territories reserved for small-scale fisheries;
- giving legal validation to the traditional rules of management drawn up by the communities over these territories.

In terms of policy, nothing today indicates that administrative officials have either the capacity or the means to impose these new rules on the maritime social body. Nothing indicates either that the community model is still active enough to fulfil its disciplinary functions or act as a territorial counterpower. What is clear though is that wherever such communities still exist, they must be strengthened and supported, particularly in scientific terms, to draw up their rules, and in legal terms, to ensure respect of their decisions by both the semi-industrial and the recreational fishing groups. For the state administration, this is quite a considerable area for research and intervention.

These new guidelines will no doubt require significant effort in terms of political and social analysis. We are familiar with the problems involved in imposing measures to reduce the fishing effort on trawlers and seiners, and the problems of applying criminal legislation in fisheries. It is possible that constituting communities and their territories could act as a counterpower and an interest group responsible for its territory, and could demand respect for the rules of management and compensation for infringements on its resources.

In legal terms, on the other hand, it is a matter of simple principles that raise no significant problems. There is extensive experience in the Mediterranean in decentralized regulation through the *prud'homes* and *cofradías*. We have seen that the system of concessions and consortia can "reconstruct" mechanisms considered in the context of *prud'homes* communities and the latter are decentralized administrative structures that come under state services.

We must therefore look at the way in which traditional legal mechanisms could be revived without upsetting the principles of the freedom of fisheries; these mechanisms could, notably, be based on private law. The systems of state concession of territory or delegation of managerial powers could also be revived.

It is not, however, necessary to mention the "ownership" of fisheries areas and resources, as some authors believe. The greatest innovation would be to consider granting concessions over collective use rights, as well as management contracts; this would form the legal basis for exercising contract and tort responsibility for the benefit of the concession holders. These rules of law which, incidentally, are well known and traditional, should thus gradually be substituted for criminal and regulatory administrative provisions. The simple fact that these new legal mechanisms are being talked about today shows that conceptual and operational progress has been made towards the establishment of responsible and sustainable fisheries. In the future, the western Mediterranean could form a model of decentralized organization rooted in its oldest sociolegal traditions.

# Bibliography

- Alegret, J-L.** 1995. *Co-management of resources and conflict management: the case of the fishermen's confrerries in Catalonia*. MARE Working Paper No. 2. Hojbjerg, Denmark.
- Alegret, J-L.** 1997. *La dimensión organizativa del sector pesquero de Cataluña: las cofradías de pescadores*. Antropología de la pesca debates en Mediterraneo. University of Murcia, Spain.
- Alegret, J-L.** 1998a. L'anthropologie maritime comme champ de l'anthropologie sociale et culturelle. *La construction des sources, anthropologie maritimes*, p. 18–25. Les cahiers de la DRAC PACA (Directions regionales des affaires culturelles/Provence-Alpes-Côte d'Azur). Marseilles, France.
- Alegret, J-L.** 1998b. *Espace, ressources et historicité: la dimension sociale de la pêche en Méditerranée nord occidentale*. Space, resources and history: the social dimension. Séminaire en sciences sociales européennes des pêches maritimes, 4<sup>th</sup> Workshop, Hermopolis, Syros. May 1998. D. Symes, ed. 1999. *Gestion des pêcheries dans les mers du sud. Management issues and practice/Europe's southern waters*. Fishing News Books. Oxford, UK, Blackwell Publishing.
- Alegret, J-L.** 1999. *Gestión comunitaria, cogestión y mercado, la evolución historica de la gestión de la pesca en mediterraneo español*. Antropología de la pesca acta del VIII Congreso de Antropología, Santiago de Compostela, Spain.
- Arroyo Martinez, I.** 2000. Concentración y asociacionismo empresarial en la actividad pesquera. *Cuadernos de Derecho Pesquero Fundación Pedro Barrié de la Maza*, p. 109–130. La Coruña, Spain.
- Artigues (d'), M. & Catanzano, J. et al.** 1995. *Les organisations de producteurs des pêches maritimes françaises; situation et typologie*. Paris, French Research Institute for Exploitation of the Sea/Living Resources Division (IFREMER RIDRV).
- Asociación Galega de Antropología, ed. A. García Allut.** 2000. *Antropología de la pesca*. Simposio III de la FAAEA. Santiago de Compostela, Spain.
- Audit, Y.** 1956. *Les madragues tunisiennes*. Paris, BCGCI.
- Authier, M.** 1981. *L'analyse institutionnelle*. Paris, Presses universitaires de France (PUF).
- Barrio García, G.** 2000. El aprovechamiento de los recursos del mar en la legislación pesquera de Galicia: naturaleza y régimen jurídico de los títulos habilitantes. *Cuadernos de Derecho Pesquero Fundación Pedro Barrié de la Maza*, p. 131–184. La Coruña, Spain.
- Beer-Gabel, J.** 1997. *Recueil des traités relatifs à la Méditerranée*. Monaco, Paris, Editions A. Pedone, Institut du droit économique de la mer.
- Bel Hadj Amor, M.** 1959. La peche et l'industrie des conserves en Tunisie. *Aspects et perspectives de l'économie tunisienne*, No. 4. Tunis.
- Berger, A. & Catanzano, J.** 1985. La pêche en Méditerranée. La modernisation de l'outil de production et l'inertie des modes de gestion. *Anthropologie maritime*, 2: 261–268. Paris.
- Berger, A. & Féral, F.** 1987. *Problématique de l'interventionnisme de la puissance publique dans le domaine des ressources marines vivantes: le poisson bleu et l'aquaculture*. Ministerio de agricultura y pesca de España, Malaga, Spain.
- Bertrand, J., Tempier E. et al.** 1994. *Une expérience de réflexion commune recherche/profession sur l'organisation de la gestion des pêches en Méditerranée*. Paris, Comité national des pêches maritimes/French Research Institute for Exploitation of the Sea/ European Economic Commission (CNPM/ IFREMER CEE) No. XIV-1- Med.
- Bonhomme J. & Rigaud, Ph.** 1998. Les graffiti comme source pour l'histoire maritime; l'anthropologie maritime comme champ de l'anthropologie sociale et culturelle. *La*

- construction des sources, anthropologie maritimes*, p. 44–47. Les cahiers de la DRAC PACA. Marseilles, France.
- Bonzon, A.** 2000. Development of economic and social indicators for the management of Mediterranean fisheries. *Marine Freshwater Resources*, 51: 493–500. Sydney, Australia.
- Borrel, A.** 1956. *Les pêches sur la côte septentrionale de la Tunisie*. Paris, Presses universitaires de France (PUF).
- Bouchon-Brandely, J. & Berthoule, A.** 1981. Les pêches maritimes en Algérie et en Tunisie. *Baudouin Revue maritime et coloniale*, Paris.
- Bourges, J.** 1908. *Les pêches maritimes en Tunisie*. Bulletin de la Direction de l'Agriculture de Tunis.
- Braudel, F.** 1949. *La Méditerranée et le monde méditerranéen à l'époque de Philippe II*. Paris, Armand Colin.
- Braudel, F.** 1985. (sous la direction de) *La Méditerranée: l'espace et l'histoire*. Paris, Flammarion.
- Braudel, F.** 1998. *Les mémoires de la Méditerranée*. Paris, de Fallois.
- Breton, F.** 1987. Características de la flota en Catalunya: crítica de las categorías de flota industrial y flota artesanal a la luz de un ejemplo catalán. *Jornadas sobre Economía y Sociología de las Comunidades Pesqueras, Santiago de Compostela University*, p. 575–592. Santiago de Compostela, Spain.
- Breton, F.** 1990. El aprendizaje del oficio de pescador: saber y transmisión del saber entre los pescadores de arrastre. *ERES Serie de Antropología, Vº Congreso de Antropología Actas del grupo de trabajo de pesca*, p. 157–174. Granada, Spain.
- Breuil, C.** 1997. *Les pêches en Méditerranée: éléments d'information sur le contexte halieutique et les enjeux économiques de leur aménagement*. FAO Fisheries Circular No. 927. Rome, FAO.
- Breuil, C.** 1999. *The GFCM in the management of Mediterranean fisheries*. Séminaire en sciences sociales européennes des pêches maritimes, 4<sup>th</sup> Workshop, Hermopolis, Syros. May 1998. D. Symes, ed. 1999. *Gestion des pêcheries dans les mers du sud. Management issues and practice/Europe's southern waters*. Fishing News Books. Oxford, UK, Blackwell Publishing.
- Brun, C.** 1996. *Con i piani triennali più incisivo il ruolo della cooperazione*. Pubblicazione a cura dell'Associazione italiana cooperative della pesca. Ravenna, Italy, Tipografia Moderna.
- Camilleri, G.** 1997. *La gestion des pêches en Méditerranée*. University of Perpignan, France. (Certificat d'aptitude professionnelle)
- Caminas, J. A., Leonart, J. Mas & Oliver, P.** 1989. Considérations méthodologiques sur la pêche aux petits métiers dans la Méditerranée espagnole. La recherche face à la pêche artisanale. French Research Institute for Development and Cooperation/French Research Institute for Exploitation of the Sea (ORSTOM/IFREMER), *International Symposium*, p. 587–592. Montpellier, France.
- Catanzano, J.** 1996. Réflexion sur l'idée de co-management et illustration méditerranéenne. University of Quebec at Rimouski. *Quel avenir pour nos pêcheries? Colloquium 442. Comanagement. What future for fisheries?*
- Catanzano, J.** 1998. *Compte rendu du séminaire RARE, régulation de l'accès aux ressources et aux écosystèmes marins*. Montpellier, France, IFREMER.
- Catanzano, J. & Rey, H.** 1997. La recherche halieutique entre science et action; réflexion sur fond de crise. *Nature, science et société*, 5(2): 19–30. Paris.
- Cazalet, B.** 2000. *L'action de la FAO dans les pêches maritimes: une évolutions vers les pêches durables et responsables*. Montpellier, France. (Ph.D. thesis in International Law)
- Charbonnier, D.** 1990. *Pêche et aquaculture en Méditerranée*. Paris, Economica.
- Chaussade, J. & Corlay, J-P.** 1988. *Atlas des pêches et cultures marines en France*. Montpellier, France, Groupement d'intérêt public, réseau d'étude des changements dans les localisations et les unités spatiales (GIP RECLUS).
- Chevallier, J.** 1981. *L'institution*. Paris, Presses universitaires de France (PUF).

- CIESM. 1998. *Gaps in Mediterranean fishery science*. Workshop Series No. 5. Dubrovnik, Croatia.
- CIRAD. 1997. *La notion de développement durable; définitions et citations*. Département gestion recherche et documentation. Paris, International Cooperation Centre of Agricultural Research for Development.
- Collet, S. 1998. *Régionalisation et éco-développement*. Séminaire en sciences sociales européennes des pêches maritimes, 4<sup>th</sup> Workshop, Hermopolis, Syros. May 1998.
- D. Symes, ed. 1999. *Gestion des pêcheries dans les mers du sud. Management issues and practice/Europe's southern waters*. Fishing News Books. Oxford, UK, Blackwell Publishing.
- Collet, S. 1999. *The legacy of a Mediterranean halieutical common*. Antropología de la pesca acta del VIII Congreso de Antropología, Santiago de Compostela, Spain.
- Copes, P. 1997. *Alternatives in fisheries management*. Canada, INCO Burnaby University.
- Coppola, R. & Lamboeuf, M. 1998. *Revue des pêcheries artisanales de la Méditerranée occidentale*. COPEMED. Rome, FAO. (mimeo)
- Crozier, M. 1963. *Le phénomène bureaucratique*. Paris, Seuil.
- Del Rosso, R. 1905. *Pesche e peschiere antiche e moderne nell'Etruria marittima*. Vol. II. Florence, Italy, Stabilimento tipografico O. Paggi.
- Direction régionale des affaires culturelles. 1998. *La construction des sources, anthropologie maritime*, p. 56–73. Les cahiers de la DRAC PACA. Marseilles, France.
- Doumenge, F. 1951. *Un type méditerranéen de colonisation côtière: Palavas*. Bulletin de la société languedocienne de géographie. Vol. XXII (I). Montpellier, France.
- Doumenge, F. 1978. *Géographie des mers*. Paris, Presses universitaires de France (PUF).
- Durazzo, A. 2000. *Projet de développement rural de Sfax: rapport sur le développement de la pêche côtière dans les délégations de El Amra et de Jebeniana*. Ministry of Agriculture/ European Economic Commission. Tunis.
- Estoppey, A. 1975. La pêche, fait social. *Le grand livre de la pêche*. Vol. 1. Paris, Bibliothèque des Arts.
- Farrugio, H. 1996. Mediterranean fisheries status and management; evolution of the research and improvement of regional cooperation. *Conférence diplomatique sur la gestion des pêches en Méditerranée*. FAO. Venice, Italy.
- Féral, F. 1977. L'évolution de la pêche artisanale en bas Languedoc. *Economie méridionale*, 97: 79–90. Montpellier, France.
- Féral, F. 1980. *La prud'homie des pêcheurs: étude de la mort d'une institution*. Publications périodiques spécialisées. Collection économie et droit de l'environnement. Lyons, France.
- Féral, F. 1986. Un phénomène de décentralisation contestée: les prud'homies de pêcheurs de Méditerranée. *CRPEE Economie méridionale*, nos 1 and 2. Montpellier, France.
- Féral, F. 1987. Un hiatus dans l'administration et les politiques des pêches maritimes. *Noroît Espaces côtiers et société littorales*, p. 355–368. Nantes, France.
- Féral, F. 1995. *L'Etat et les fraudes commerciales*. Perpignan, France, Presses universitaires de France (PUP).
- Féral, F. 1997. Les pêches maritimes en Languedoc Roussillon. Atlas du Languedoc Roussillon GIP Reclus. La documentation française coedited by Groupement d'intérêt public, réseau d'étude des changements dans les localisations et les unités spatiales (GIP RECLUS) and La documentation française, *Dynamiques du territoire*. Montpellier, France.
- Féral, F. 1998. *Appropriation ou privatisation de la mer?* Montpellier, France, RARE IFREMER.
- Féral, F. 2000. *Approche dialectique du droit de l'administration: l'appareil d'Etat face à la société civile*. Paris, L'Harmattan.
- Féral, F., Mamontoff, C. & Roucan, O. 1995. *Le Littoral, l'Etat régulateur: droit domaniale et stratégie politique*. Institut Océanographique National Collection Propos, Paris.

- Flory, M.** 1997. Mondialization et droit international du développement. *Revue générale de droit international public*, (3): 610–633. Paris, Editions A. Pedone.
- Fraga Estévez, C.** 2000. El acceso a los caladeros comunitarios por medio de las empresas conjuntas. *Cuadernos de Derecho Pesquero Fundación Pedro Barrié de la Maza*, p. 35–46. La Coruña, Spain.
- Frangoudes, K.** 1993a. *Le rôle des organisations professionnelles dans la gestion des pêches en Méditerranée*. ASCA, Contrat D.G. XIV C.C.E. No. XIV-1/MED/91/010. Brussels.
- Frangoudes, K.** 1993b. *Le rôle des organisations professionnelles dans la gestion des pêches en Méditerranée; le cas de la Grèce*. ASCA, Contrat D.G. XIV C.C.E. No. XIV-1/MED/91/010. Brussels.
- Frangoudes, K.** 1999. *Gestion halieutique dans la golfe de Thermaikos*. Séminaire en sciences sociales européennes des pêches maritimes, 4<sup>th</sup> Workshop, Hermopolis, Syros. May 1998. D. Symes, ed. 1999. *Gestion des pêcheries dans les mers du sud. Management issues and practice/Europe's southern waters*. Fishing News Books. Oxford, UK, Blackwell Publishing.
- Franquesa, R.** 1993. *Le rôle des organisations professionnelles dans la gestion des pêches en Méditerranée: étude de cas concernant l'Espagne*. ASCA, Contrat D.G. XIV C.C.E. No. XIV-1/MED/91/010. Brussels.
- Franquesa, R., Malouli, I.M. & Alarcón J.A.** 2001. *Feasibility assessment for a database on socio-economic indicators for Mediterranean fisheries*. Studies and reviews. General Fisheries Commission for the Mediterranean, No. 71. Rome, FAO. 55 pp.
- Gabriel-Robinet, L.** 1938. Les chalutiers et la crise de la pêche. *Revue des deux mondes*. Vol. 1. Paris.
- Galle, M.** 1993. *Le rôle des organisations professionnelles dans la gestion des pêches en Méditerranée. Etude de cas concernant la France*. ASCA, Contrat D.G. XIV C.C.E. No. XIV-1/MED/91/010. Brussels.
- García-Pita y Lastres, J. L.** 2000. Vigencia de los convenios internacionales sobre limitación de la responsabilidad civil de los navieros y propietarios de buques. Coexistencia de sus disposiciones con el régimen del código de comercio. *Cuadernos de Derecho Pesquero Fundación Pedro Barrié de la Maza*, p. 185–234. La Coruña, Spain.
- Garidou, B.** 1994. *L'étang de crise: un conflit d'utilisation du domaine public maritime sur l'Etang de Leucate*. University of Perpignan, France. (Dissertation in Law)
- Généralité de Catalogna.** 1994. *Pla director de política pesquera de Catalunya*. Agriculture Department, Ramaderia Pesca, Direcció General de Pesca Marítima. Barcelona, Spain.
- Giffard, J.-R.** 1967. *L'économie des pêches en Bas Languedoc*. Montpellier, France. (Ph.D. thesis [Geography])
- Giovannoni, V.** 1998. Des citoyens extraordinaires: les marins-pêcheurs de la Méditerranée française. L'anthropologie maritime comme champ de l'anthropologie sociale et culturelle. *La construction des sources, anthropologie maritimes*, p. 26–36. Les cahiers de la DRAC PACA. Marseilles, France.
- Gourret, P.** 1894. *Les pêcheries et les poissons de la Méditerranée (Provence)*. Paris, Lib. J.-B. Baillères & fils, Ed. Serre (reprinted 1981 as *Provence des pêcheurs*).
- Grefte, X.** 1994. *Economie des politiques publiques*. Paris, Dalloz.
- Guibaud, J.** 1974. *La pêche et le droit*. 2nd ed. Paris, Librairies techniques.
- Guillou, A. & Crespi, V.** 1999. *Enquête cadre concernant la répartition, la composition et l'activité des petits métiers dans le golfe du Lion*. Sète, France, IFREMER.
- Guittierrez, Castillo V. & Vazquez Gomez, E.M.** 1999. *La zone de protection de la pêche établie par l'Espagne en Méditerranée*. University of Cordova, Spain.
- Heldt, H.** 1942. La pêche en Tunisie. *Encyclopédie maritime et coloniale*. Vol. I. Paris.
- Kambona, J.** 2001. *50 years of the General Fisheries Commission for the Mediterranean; its evolution, achievements and future direction*. Rome, FAO. 83 pp.
- Lacoste, L.** 1911. *Essai sur l'industrie de la pêche maritime dans le nord de la berbérie*. Oran, Algeria, BTSGA.
- Laoust, E.** 1923. *Pêcheurs berbères du Sous*. *Revue Hespéris*. Rabat, Morocco.

- Le Corre, G. & Farrugio, H.** 1986. Les pêches côtières et lagunaires en Languedoc-Roussillon. *CRPEE Economie méridionale*, nos 1 and 2. Montpellier, France.
- Lleonart, J. et al.** 1998. *Mediterranean fisheries and overview*. Barcelona, Spain, S.A.P.
- Lopez, C.** 1998. Les ex-voto marin comme source ethnographiques: la tradition votive sétoise. L'anthropologie maritime comme champ de l'anthropologie sociale et culturelle. *La construction des sources, anthropologie maritimes*, p. 18–25. Les cahiers de la DRAC PACA. Marseille, France.
- Loth, G.** 1905. *Le peuplement Italien en Tunisie et en Algérie*. Paris, A. Colin.
- Louis, A.** 1962-63. Les îles Kerkena, étude d'ethnographie tunisienne et de géographie humaine. Vol. 1. *Les travaux*. Vol. 2. *Les jours*. IBLA publications nos 26 and 27. Tunis.
- Malvárez García, G. & Pollard, J.** 2000. Origins, management and measurement of stress in the coast of southern Spain. *Coastal Management*, 28: 215–234. Coleraine, Ireland.
- Manteca Valdelande, V.** 2000. Organizaciones pesqueras internacionales. *Cuadernos de Derecho Pesquero Fundación Pedro Barrié de la Maza*, p. 47–62. La Coruña, Spain.
- Marceille, G.** 1919. *Les prud'hommes pêcheurs de la Méditerranée*. Toulouse, France. (Ph. D thesis [Political and Economic Science])
- Marty, F.** 1998. *Inventaire du patrimoine conservé par les prud'homies de pêche dans la région Languedoc-Roussillon*. D.R.A.C. Languedoc-Roussillon. Montpellier, France.
- Menedez Rexach, A.** 2000. La regulación española sobre el acceso a los recursos pesqueros y su previsible evolución en una futura ley de pesca marítima. *Cuadernos de Derecho Pesquero Fundación Pedro Barrié de la Maza*, p. 235–262. La Coruña, Spain.
- Mény, Y. et al.** 1994. *Politiques publiques en Europe*. Paris, L' Harmattan.
- Mény, Y. & Thoënic, J.C.** 1989. *Politiques publiques*. Paris, Presses universitaires de France (PUF).
- Meuriot, E.** 1986. *La flotte de pêche française de 1945 à 1983. Politiques et réalités*. Paris, IFREMER.
- Meuriot, E. & Dremière, P-Y.** 1986. L'impact d'une politique de l'effort de pêche: les chalutiers de Méditerranée et les systèmes de licences. *CRPEE Economie méridionale*, nos1 and 2. Montpellier, France.
- Ministry of Agriculture and Fisheries.** 1999. *Artisanal fisheries in Malta*. Malta.
- Monnier, E.** 1992. *Evaluation de l'action des pouvoirs publics*. Paris, Economica.
- Muller, P.** 1990. *Les politiques publiques*. Paris, PUF Que sais-je?
- Muller, P. et al.** 1987. *L'Etat en action. Politiques publiques et corporatismes*. Paris, PUF.
- Nick, S.** 1997. *Interdépendance et solidarité dans le monde maritime*. Comité d'études et de services des assureurs maritimes et transports de France (CESAM) No. 95. Paris, Charles Léopold Mayer.
- Nicolas, L.** 1998. La communitas de Beauduc, une forme singulière de culture maritime. L'anthropologie maritime comme champ de l'anthropologie sociale et culturelle. *La construction des sources, anthropologie maritimes*, p. 36–43. Les cahiers de la DRAC PACA. Marseille, France.
- Nioche, J.P.** 1982. De l'évaluation à l'analyse des politiques publiques. *Revue française de science politique*. Paris.
- Otero Lastres, J.M.** 2000. Consideraciones generales sobre el buque pesquero en el ámbito mercantil. *Cuadernos de Derecho Pesquero Fundación Pedro Barrié de la Maza*, p. 263–280. La Coruña, Spain.
- Pabois, M.** 1998. Le patrimoine culturel maritime et lagunaire en frances; bilan et perspectives. *La construction des sources, anthropologie maritimes*, p. 12–17. Les cahiers de la DRAC PACA. Marseille, France.
- Payan d'Angery, Ch.** 1873. *Les prud'hommes pêcheurs de Marseille et leurs archives*. Aix-en-Provence, France, Imprimerie J. Nicot.
- Pellat, J.** 1962. *Psychosociologie politique des pêcheurs de la prud'homie de Palavas*. Montpellier, France. (Dissertation in Political Science)
- Péquignot, G.** 1984. *L'interventionnisme économique de la puissance publique. Etudes en l'honneur du doyen Georges PEQUIGNOT*, Department of Law and Economics,

- University of Montpellier I. European School of Management (CERAM), Vols 1 and 2. 739 pp.
- Plusquellec, P.** 1955. *Les madragues en Tunisie*. BEST No. 107. Tunis.
- Poujade, J.** 1936. *Les prud'homies des pêcheurs de la Méditerranée*. Paris. (Ph.D. thesis [Law])
- Quermonne, J.L.** 1991. *L'appareil administratif*. Paris, Seuil coll. Points.
- Rey, H.** 1989. *Etude économique de la pêche aux petits métiers en Languedoc Roussillon*. Montpellier, France, CEP.
- Rey, H. & Valarié, P.** 1998. *La politique des pêches en Méditerranée peut-elle oublier qu'elle s'inscrit dans l'histoire?* Séminaire en sciences sociales européennes des pêches maritimes, 4<sup>th</sup> Workshop, Hermopolis, Syros. May 1998. D. Symes, ed. 1999. *Gestion des pêcheries dans les mers du sud. Management issues and practice/Europe's southern waters*. Fishing News Books. Oxford, UK, Blackwell Publishing.
- Ruíz García, J.R.** 2000. Tributación de la empresa pesquera. *Cuadernos de Derecho Pesquero Fundación Pedro Barrié de la Maza*, p. 281–290. La Coruña, Spain.
- Sfez, L.** 1981. *Critique de la décision*. Paris, Presse de la FNSP.
- Sobrino, J.M.** 2000. La progresiva reducción del principio de libertad de pesca. *Cuadernos de Derecho Pesquero Fundación Pedro Barrié de la Maza*, p. 75–108. La Coruña, Spain.
- Suares de Vivero, J.L., Frieyro, M., Rodriguez, J.C. & Gonzalez, G.** 1999. *La construction d'une police des pêches régionale commune en Méditerranée*. Séminaire en sciences sociales européennes des pêches maritimes, 4<sup>th</sup> Workshop, Hermopolis, Syros. May 1998. D. Symes, ed. 1999. *Gestion des pêcheries dans les mers du sud. Management issues and practice/Europe's southern waters*. Fishing News Books. Oxford, UK, Blackwell Publishing.
- Tavares de Pinho, A.** 1992. Le conseil général des pêches pour la Méditerranée. *Revue générale de droit international public*, p. 40–63. Paris, Editions A. Pedone.
- Tempier, E.** 1986. Prud'homie et régulation de l'effort de pêche. *CRPEE Economie méridionale*, nos 1 and 2.
- Tempier, E.** 1993. La pêche franco-méditerranéenne à l'épreuve de l'administration. *Fifth Agency for French Education Abroad (AEFE) Conference*, Brussels.
- Thomazi, A.** 1950. *L'histoire de la pêche de l'âge de pierre à nos jours*. Paris, Editions Payot.
- Weber, J.** 1992. *Le rôle des organisations professionnelles dans la gestion des pêches en Méditerranée* (Spain, France, Italy, Greece). ASCA, Contract D.G. XIV C.C.E. No. XIV-1/MED/91/010. Brussels.
- Weber, J. & Galle, M.** 1993. Exploring the black box. Decision-making processes in fisheries: the case of the French Mediterranean. *Comm. World Fisheries Congress*, Athens.
- Zarella, A.D.** 1991. *La politique internationale des pêcheries en Méditerranée: exploitation, gestion et conservation des ressources de la mer*. Montpellier University, France. (Ph.D. thesis [Law])
- Zougari, A. & Lopez Garcia, B.** 1999. *Répertoire des chercheurs sur le Maroc Méditerranéen*. Spanish Embassy in Morocco, Rabat.

This publication considers fisheries management policies in the Mediterranean in the light of the new objectives of sustainability and governance. Emphasis is put on the decentralization of public action and the reform of institutional mechanisms.

The first chapter assesses the historical and societal bases of the dualism of small-scale fisheries and industrial fisheries. The dialectical relationship of power between these socio-economic categories is a result of arbitration by the public authorities that have entered into a spiral of interventionism. This has overturned the decentralized secular models of organization and regulation of fishing communities. The similarity of the legal frameworks governing access to fisheries, the statutes of the profession and the areas of intervention by the administration are considered in Chapter II. Chapter III looks at the institutional convergences between the countries of the region. The author identifies excessive administration and an ambivalence in the role of the professional organizations. The author also underlines the various initiatives aimed at rebuilding the communities' principles of self-regulation, and questions the policy-makers' capacity to commit themselves to policies of territorial allocation, as well as the communities' capacity to fulfil a regulatory function enforceable in the industrial sector. Legal validation of the communities and their traditional rules of management over territories to be allocated would be a priority.

ISBN 92-5-104696-4 ISSN 0429-9345



9 789251 046968

TC/M/Y2788E/1/03.04/2050