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European Social Science Fisheries Network

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**Southern Waters:  
Management Issues and Practice**

Network Workshop 4  
Syros, 14-16 May 1998



Department of Geography

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## 0.0 Summary

### 0.1 *Introduction*

The report summarises the proceedings of the fourth European Social Science Fisheries Network (ESSFiN) Workshop on *Southern Waters: Management Issues and Practice*, held in Hermoupolis on Syros, 14-16 May 1998. The Workshop embraced a wide range of prevailing themes in the social science of fisheries in European southern waters, taken primarily to include the Black Sea and the Mediterranean. For the Mediterranean in particular, the Workshop is considered a timely review of fisheries management issues and practice. Mediterranean fisheries are specifically structured in terms of their narrow continental shelf, the lack of 200 mile EEZs and the predominance of small scale enterprises. Fisheries management is highly fragmented and subject to a changing regime. The management system is thus in a state of evolution, both in terms of the European Community's own fisheries policy and with regard to the wider remit of the General Fisheries Commission for the Mediterranean, currently undergoing a reform process.

### 0.2 *Proceedings*

In all 24 ESSFiN participants attended the Workshop from 10 European states. 17 papers were presented in total and one was tabled without oral presentation. Despite efforts to secure a wide geographical coverage the distribution of papers was skewed in favour of the central and western Mediterranean fisheries. There were 2 invited speakers, Christophe Breuil from the FAO Fisheries Department, in relation to the work and reform of the General Fisheries Commission for the Mediterranean, and Ernesto Penas Lado of the European Commission, on the development of a common fisheries policy for the Mediterranean. The papers were organised in a total of 7 sessions including an introductory and a final plenary discussion. The final discussion session was introduced by three rapporteurs invited to comment on the proceedings and the outstanding research issues. On the final day of the programme, participants visited fishing ports on the neighbouring island of Paros where they met with local representatives to discuss the issues and problems facing the industry in the area.

### 0.3 *Analysis*

Given the specificities of the Mediterranean in terms of physiography, biology political geography and organisational structures and development it is hard to envisage the emergence of a common fisheries policy framework in the Mediterranean which emulates the experience in the Atlantic, though further consideration of the contrasts and commonalities between the two regions is warranted.

The development of a common policy for Mediterranean fisheries is a key challenge for the GFCM, the European Community and the coastal states of the area. The region is a particularly complex one, both politically,

economically, culturally and in terms of the specificities of the fishing sector. Much will depend on developing a political consensus that is able to engender the development of common policies and on the ability of the actors involved to cope with the region's specific characteristics and diversity. Nations may need to undergo considerable development in order to adapt to the principles of a common system of governance for the Mediterranean through regional and sub-regional cooperation.

#### 0.4 *Implications for research*

'Contextuality' and 'diversity' represent the relevant key words to describe the thematic content of the Workshop. Contributions attempted to place the fisheries of southern waters in their social, cultural, historical, political and economic contexts. Coping with the context, diversity and specificities of southern fisheries represents a significant challenge, but also a central focus for the social sciences. This is also the key test for emerging management approaches in southern waters, which must attempt to balance the development of common management approaches with the need for differentiated management according to diversity of setting.

Several key research themes were identified including:

- \* the geo-politics of southern waters and the means for the development of international cooperation and common approaches to fisheries management; this is relevant given the regions' complex and evolving legal-jurisdictional space, the international and transboundary nature of its fisheries, and its emerging institutional framework; for the Black Sea fisheries, attention is required on the current transitional status of the fishing industry;
- \* the historic forms of appropriation, territorial use and local management institutions and their relevance for modern systems of management;
- \* organisational development, at a macro-level involving the reform of the GFCM and development of the CFP in the Mediterranean in line with GFCM policy orientations, and with respect to local institutions and their participation in the policy process;
- \* the role and social characteristics of the small boat sector with a view to the development of more sensitive and targeted policy approaches and a clearer demarcation of its diverse sub-sectors;
- \* coastal or regional economies and development and the interaction between coastal fisheries and new stakeholders in the coastal zone, notably tourism and aquaculture.

## 1.0 Introduction

- 1.1 This report summarises the proceedings of the Workshop on *Southern Waters: Management Issues and Practice*, held in Hermoupolis on Syros, 14-16 May 1998. This was the fourth in a series of five scheduled workshops within the Concerted Action Programme for the European Social Science Fisheries Network (FAIR CT95 0070). It is the second workshop to focus on a regional theme, the first being held in Aarhus in May 1997 on *Northern Waters: Management Issues and Practice*. The series of Workshops aims to bring together social scientists from Europe and the North Atlantic region working on fisheries, in order to present and review their research findings and to explore the relevance of such findings for the development of fisheries policy and management strategies.
- 1.2 The scope of the Syros Workshop aimed to embrace the wide range of prevailing themes in the social science of fisheries in Southern Waters, taken primarily to include the Black Sea and the Mediterranean. For the Mediterranean in particular, the Workshop is considered a timely state of the art review of fisheries management issues and practice. Mediterranean fisheries are specifically structured and undergoing a phase of transition. With a narrow continental shelf and no 200 mile EEZs, coastal state jurisdiction extends only to 12 nm, beyond which lie international waters. The industry's structure is dominated by small scale enterprises with an underdeveloped shore based infrastructure. Management of the region's marine resources is highly fragmented and subject to a changing regime which poses a considerable challenge in developing an integrated approach to fisheries management. The management system itself is in a state of evolution, both in terms of the European Community's own fisheries policy and with regard to the wider remit of the General Fisheries Commission for the Mediterranean, currently undergoing a reform process.
- 1.3 In practice, the papers presented were more narrowly defined in their geographical focus than was hoped. Despite efforts to secure a wide geographical coverage the distribution was skewed heavily in favour of the central and western Mediterranean fisheries and no papers were presented with an exclusive focus on the North African seaboard. One paper had been scheduled for presentation on the theme of Tunisian fisheries but the author withdrew at a late stage. Another late withdrawal significantly disturbed the balance of the theme session on Black Sea fisheries and in the event only two papers were presented here. We were, however, able to welcome to the Workshop, Christophe Breuil from the FAO Fisheries Department who would provide a valuable insight into the work and reform of the General Fisheries Commission for the Mediterranean. Ernesto Penas Lado of the European Commission (DG XIV) also prepared a paper on the development of a common fisheries policy for the Mediterranean. This was presented on his behalf by Dominique Levieil, also of DG XIV.
- 1.4 In all 24 ESSFiN participants attended the Workshop from 10 European states. 17 papers were presented in total and one was tabled without oral presentation.

Papers had been submitted following an open invitation within the ESSFiN newsletter FiNESSE. The papers were organised in a total of 7 sessions including an introductory and a final plenary discussion. The opening session was also attended by a number of representatives from the national and regional administrations and from fishing industry including a presentation by Vassilios Geranidis (Deputy Minister of Agriculture) on Greek and Mediterranean fisheries. The final discussion session of the Workshop was introduced by three invited rapporteurs who were asked to comment on the proceedings and the research issues. On the final day of the programme, participants visited fishing ports on the neighbouring island of Paros where they were welcomed by local representatives for a highly informative and lively discussion of the issues and problems facing the industry in the area.

- 1.5 The following report is arranged in three sections: (i) extended abstracts of all papers, together with brief summaries of the sessional discussions; some papers have been relocated to give a more logical structure to the proceedings; (ii) a report of the final discussion, including rapporteurs' comments; and (iii) recommendations for future research.
- 1.6 Provisional agreement has been reached with Blackwell Science for the publication of a selection of papers from the Workshop in a book to be entitled: *Southern Waters: Management Issues and Practice*.
- 1.7 The coordinator of ESSFiN would like to thank local organiser Babis Kasimis for all his exceptional organisational arrangements for the Workshop and the Municipality of Hermoupolis for providing excellent facilities for the meeting place. Finally we thank all participants attending the Workshop for their contributions and comments during the proceedings.

David Symes  
Jeremy Phillipson  
Hull, September 1998



## 2.0 Proceedings

### 2.1 General themes

#### 2.1.1 Introduction

The first group of papers presented at the Workshop combined to provide a contextual background for the proceedings through consideration of the political, socio-cultural, historical, economic and legal dimensions of the 'southern waters'. These were prefaced by a presentation by invited speaker *Vassilios Geranidis*, Deputy Minister of Agriculture for Greece, who outlined the specificities of Mediterranean fisheries, which called for a specific fisheries management approach, and the difficult task of developing a common policy given the large numbers of states involved. *Serge Collet* drew attention to the small boat artisanal sector and considered its future viability based on a consideration of the value of historic forms of appropriation and new challenges facing the Mediterranean in terms of integrated coastal management. This historic reference was complemented by the contributions of *Ellen Hoefnagel*, analysing the role of culture in determining levels of user participation and *Hélène Rey et al.*, who addressed the political and legal dimensions of Mediterranean fisheries. Finally, all four papers can be placed in the framework elaborated by *Rob van Ginkel* which provided an analysis of contextuality in the setting of the Mediterranean fisheries.

#### 2.1.2 Fisheries in the Mediterranean

*Vassilios Geranidis, Deputy Minister of Agriculture, Greece*

The exploitation of fisheries constitutes the source of a range of activities that are significant for the economy of coastal areas. The manner of exploitation of Mediterranean fisheries is determined by a number of specific characteristics including a narrow continental shelf, limited natural renewal of the waters and low levels of nourishment, and a variety of species. These justify a different approach to fisheries management to that in the Atlantic.

90% of fishing in the Mediterranean is coastal. It is regionally diverse in terms of methods, quantity and quality of the fisheries and in terms of socio-economic conditions. In the open seas, outside of the territorial waters, trawls, seines and driftnets are used to target the migratory species of tuna and swordfish - these have been subject to overfishing due to an increase in fishing effort.

Increasing populations around the Mediterranean, rising levels of pollution and a lack of control of human activities, have a significant impact on the environment and have created serious concerns for the future. Establishing a policy for the protection of fisheries has become indispensable in order to protect fishing capital and the coastal economy.

The first main step by the European Community was to set up a single set of regulations for fishing in the Mediterranean and a set of common rules limiting fishing methods and target species. Since 1987 this Common Fisheries Policy has attempted to balance fishing with the available stocks through orientation programmes for the fishing fleet and a focus on long term prospects. The policy has considerably reduced fishing effort through fleet reductions and limiting fishing times. Finally, since January 1998 quotas have been introduced for the protection of tuna.

While member states of the European Union may participate in this Common Fisheries Policy and limit their fishing effort a key problem emerges in that the Mediterranean fisheries are fished by states outside of the policy community. Intensive fishing activity also takes place by states from outside of the Mediterranean such as Japan and Korea. Some effort was made towards the development of a common policy through diplomatic conferences held in Crete and Venice. It is a long process - but a necessary one - to develop a consensus, common rules and behaviours for management. Regionalisation is not considered the solution within the Mediterranean as this may lead to fragmented management. A central authority which takes the initiative for implementation of a common policy is preferred.

2.1.3 *Regionalisation and eco-development of fisheries. Which path of viability for the artisanal fisheries in the Mediterranean Sea?*

*Serge Collet, Universität Hamburg, Germany*

It would be wrong to deal with Mediterranean fisheries without considering their specificities and history. In the debate concerning the viability of artisanal fisheries in the Mediterranean the attempt to take into account the structural opposition between small scale fisheries, considered more ecological, and the large scale sector, considered as too destructive, was often seen as a romantic view. It remains, however, that the consideration of past models and structural orientations may be relevant in determining the future of artisanal fisheries. From a management perspective of global fishing effort, the artisanal mode of fishing - which is particularly relevant in the Mediterranean context - poses control problems, partly because of a lack of knowledge as to this sector's size and operations. Thus the General Fisheries Commission for the Mediterranean has estimated that there are some 100,000 boat owners - this may imply a considerable quantity of fish. However, there is also a need to consider the qualitative aspects of the 'sector'.

There is historic evidence of territorial use and the allocation of fishing zones in Tunisia, and similar arrangements in Sicily in the Mesina Straits for the fishing of swordfish, and around Malta - areas characterised by Phoenician civilisation around the 9th Century B.C. Could such historic forms effectively solve technical conflicts of an external nature? It is sometimes supposed that the Mediterranean has always been a fragile and overexploited environment; however, based on evidence from the Phoenician and Medieval periods, it is questionable that this can be verified historically.

The relationship between technical forms of appropriation and characteristics of the Mediterranean ecosystem suggests a territorial distribution. Does territorial use and the historical procedures for allocating fishing areas proceed from a historical logic? If there is a historical and ecological logic then there is a need to redevelop such a logic and according to the specificities of the Mediterranean.

Considerable damage has been done to the fragile coastal system. Several initiatives during the last two decades have been developed involving the UN and a number of Mediterranean institutions to counter pollution. More recently there have been developments towards integrated management of coastal systems, an urgent need given degradation of the ecosystems. There is a need to rehabilitate the ecosystem - it is not simply a question of fishing quantities and efforts. This requires a model oriented to the eco-development of fishing based on historic rights. The artisanal sector, given its size, needs to be given priority in management considerations.

#### 2.1.4 *Mediterranean cultures, fisheries and different types of co-management*

*Ellen Hoefnagel, LEI-DLO, Netherlands*

Comparison of the degree of influence exerted by user groups in the North Atlantic and the Mediterranean shows many variations. The same holds true for the levels of influence exerted by fishermen within the Mediterranean, although here the physical conditions and fleet structures do not vary greatly. In seeking to explain these differences the paper focuses on a cultural approach.

European fisheries management can be subject to several intervening cultures - European, national, regional, local and professional. Professional cultures can be further divided into management and fisher cultures which may determine the extent to which the advice of professionals and scientists are incorporated in management decisions. National culture will determine whether a management style is hierarchical or democratic in nature, or more market oriented. Fisher professional cultures can also be evident and relate to levels of individualism or cooperation.

In order to classify national cultures, five dimensions or systems of majority preferences are identified, based on the theory of Hofstede (1980), including power distance (the extent to which less powerful members of society accept that power is distributed unequally), individualism (based on the ties between individuals in society), masculinity (relating to the distinctiveness of gender roles), uncertainty avoidance (the extent to which societal members feel threatened by uncertainty) and long term orientation (the extent to which a society displays a future oriented perspective). Based on combinations of these dimensions, five 'mental images' are identified which contribute to differences in culture, organisation, institutions and policy. Pyramidal (characterised by top-down decision making, hierarchy and centralisation) and family

(characterised by moral relationships) mental images are seen to be particularly relevant in the Mediterranean.

While the management style of European bodies can be called informative and consultative, individual Mediterranean countries tend to regard their own national fisheries management systems as more important than the European level. The degree of user group influence on Mediterranean fisheries management varies between individual states and according to national culture. From the countries under analysis, Greek user groups have the lowest level of participation. In Mediterranean France the *prud'homies* are involved in consultation, though greater influence is vested with regional and national committees. Prud'homal influence is much stronger in Corsica. Consultation is also apparent in Italy and here some forms of self-regulation are evident. Finally, the Spanish *cofradias* are considered to be influential at all decision making levels. Different forms of co-management can be designed according to the prevailing national or regional cultures.

Source: Hofstede, G. (1980) *Culture's Consequences*. Sage, London.

#### 2.1.5 *La politique des pêches en Méditerranée peut-elle oublier qu'elle s'inscrit dans l'histoire?*

*H. Rey, P. Valarié and J. Catanzano, Université de Montpellier, France*

Through incorporating the political dimension into models of fisheries management, the paper contributes to the ongoing debate concerning the development of an alternative management regime to that established in NE Atlantic waters. There have been several constructions of southern Europe and the Mediterranean space. The differentialist vision stresses aspects of fragmentation and posits that implementation of universal cultural, economic or political models is impossible. The developmentalist or functionalist public policy approach focuses on commonalities and here specificities are set aside and local space is subsequent to supranational policy. A third school is concerned with making local space adequate for the implementation of standards, policies and models.

It is necessary to consider the history and heritage of the Mediterranean countries in the development of models. The Mediterranean occupies a specific position as it is affected by the partial implementation of Community policies; the policy is limited in scope to structures and markets. Fisheries management in the Mediterranean is affected by a range of specificities. The region displays a diversity of regulatory, legal and institutional measures and structures between states - and sometimes at variance with the development of common policies. In addition, the semi-enclosed nature of the sea has particular implications for maritime law. There also appears to be a lower frequency of conflicts concerning access to resources. There are extreme difficulties with the gathering of reliable data given discrepancies in measuring fleet capacity and the often pluriactive and fragmented nature of economic activity.

At the national scale it is possible to identify several developments in public intervention in fisheries on the basis of their temporal scale, political system and systems of interest representation. The first from 1900-1945, when fishermen were at the centre of the representation system and the object of policy, was the first configurations of the welfare state and affected the rights of recognition of fishermen. It involved a short term temporal scale and local systems of representation and professional organisation - the *prud'homie*, cooperative or *cofradia* systems. During the second period from 1946 until the 1990s the object became the fishing resources, within both national and European frameworks. The period is characterised by a mid-term temporal scale. The notion of an inexhaustible resource base was still evident and the approach was more hierarchical and state centred. Here the organisation of professional interests became increasingly vertical. The most recent phase involves the current crisis of the welfare state and new concerns concerning the environment. The crisis of vertically constructed management has led to the development of new experimental management approaches to territorial and local decentralisation.

#### 2.1.6 *The dynamics of fisheries: a sensitising framework*

*Rob van Ginkel*

Utilisation of renewable marine resources is fraught with problems and fishermen are often held responsible. Focusing on the role of fishermen is insufficient for understanding the fisheries as a complex and evolving socio-natural regime. Attention must also be paid to the wider context, the unintended and unforeseen consequences of their behaviour and of management systems, and the feedback responses that give rise to new coping strategies. This involves consideration of contextuality and the macro-social forces operating beyond local communities of resource users but which can have a strong impact on them.

Factors like diversity, complexity and dynamics make for uncertainty, interfere with management objectives and desired outcomes and can impede governance structures. Often fisheries management deals only with single fisheries and single issues, reducing the complexity factor and ignoring variability and dynamics. Fisheries, however, is an evolving socio-ecological regime, a historical, economic and political process embedded in encompassing political-economic and cultural systems. They must be interpreted in a much broader contextual framework. Contextuality is, however, generally poorly theorised; exogenous factors are often reduced to the great unknown 'E'.

Several levels of exogenous contextual factors can be distinguished. As a minimal framework attention should be given to ecological, demographic, infrastructural, technological, economic, political and administrative, legal, social and cultural factors. These impinge on localised systems of common pool resources and the adaptive responses of users to resource depletion, including diversification, intensification, specialisation and withdrawal.

As users see natural processes as dynamic, unpredictable, complicated and chaotic it follows that a reasonable strategy for management is to devote closer attention to fishermen's knowledge. However, even local stakeholders cannot foresee exogenous factors impinging on their modes of resource exploitation. While empowerment of users may be one step towards greater legitimacy and compliance, flexibility is required to enable optimal adaptive strategies in the face of the consequences of exogenous factors. A key challenge is to incorporate within proactive models the ability to cope with uncertainty arising from such factors.

#### 2.1.7 *Discussion*

Attempts to develop a common policy for the Mediterranean are implicitly weak and contradictory given the range of different conditions that persist in the region. The need for an improved European common policy for the artisanal sector and an integrated policy for the environment, is in part compensated for by the individual efforts of coastal states in regulating their own inshore sectors. However, the implementation of restrictive measures does have social and economic consequences in terms of employment and demographic composition of regions, and there is a need for corresponding policies. Here, aquaculture and processing activity may play an important role in generating more balanced development.

Historical references to management are particularly relevant in developing new models for fisheries. These must, however, be based on an extrapolation of the past rather than attempts for reinvention. This would apply to questions of territoriality which are particularly conflictual in the Mediterranean. In part this relates to the difficulty of defining the geographical extent of artisanal and coastal fishing. In considering territorial appropriation systems it is also necessary to distinguish between concepts of management and regulation. While implementing regulation is a step towards management, management implies some level of mastery or knowledge of the overall situation. This may be difficult when based on only a small part of the whole system. It is hard for an individual or group to understand the effects of their individual or group activities on whole stocks which may be shared between a number of fleets or nations. This calls for a wider information system through which to assess the effects of activities and regulation.

The deconstruction of cultural dimensions is seen to be relevant in determining intra-state diversity in institutional approach, such as between Atlantic and Mediterranean Spain, or north and Mediterranean France. It is also feasible that the professional culture of fishermen will not fit exactly with national patterns. Here there is a need for a more fishermen oriented analysis in identifying particular sub-groups of national or regional populations. The cultural analysis of fisheries administrators and scientists may also be a productive line of enquiry in deciphering why certain groups are more in favour of certain regulatory solutions than others.

## 2.2 The western Mediterranean

### 2.2.1 Introduction

Three different disciplinary perspectives on western Mediterranean fisheries were given within the second set of papers. *Denis Bailly and Ramon Franquesa* provided an economic outlook and considered the role of economic information in fisheries management in the Mediterranean and within the context of the GFCM. For *Michel Morin* the focus was essentially a legal one relating to the separation of Mediterranean waters between territorial seas and high seas and the issues associated with potential extensions of national space. Finally, *Juan Luis Suarez de Vivero et al.* provided a geographic perspective on the evolving regional politics of the Mediterranean. The EU, and its attempts to introduce a fisheries policy for the region, was contextualised within the overall Mediterranean geo-political framework.

### 2.2.2 Economic information and fisheries management in the Mediterranean

*Denis Bailly and Ramon Franquesa, France, Spain*

The paper presents a synthesis of the findings of a working group on economics and statistics for fisheries management in the Mediterranean under the auspices of the GFCM held in December 1997 in Rome. The objective of the group was to consider the nature of economic information used for the management of fisheries.

The matter of managing fisheries is fundamentally the issue of exercising the implementation of collective choices which frame individual choices. Information is a crucial element in formulating or reformulating policies. In European fisheries management most expert derived information contributing to policy making is biological in nature. The experts who compile this information come to play an important role in the policy formulating process and in the formulation of collective action. It is suggested that there is some risk of confusing research and information development with the formulation of management policies.

Regarding the management of fishing in the Mediterranean there is an institutional richness which should be allowed to continue within processes of institutional change. With this in mind, the working group attempted to consider a homogenous system of economic and social information production, taking into account the social and economic realities of fishing activity. Throughout the Mediterranean there is a certain homogeneity in terms of technical practices and this reflects certain common underlying social structures and similar forms of modality of representing interests and values. This justifies and gives the opportunity of observing homogenous economic and social phenomena at the level of the Mediterranean and it is considered that the GFCM forms the natural framework for producing this kind of economic information.

The richness of history and the diversity of the forms of management in the Mediterranean have not been taken into account within the decision making of the GFCM. The meeting of the working group was faced by conflicts of administrative logic between justifying the costs of the meeting and a lack of will to developing new management openings and innovations. The group resulted in only a meagre declaration of intention to explore new initiatives. What emerged was generally disconnected from the daily practice of fisheries management in the Mediterranean.

The main value of considering the history of management in the Mediterranean is to have a multiplicity of examples of diverse forms of management. It is also possible to consider new innovative institutional forms for Atlantic coastal fisheries based on the analytical utility of historic forms in the Mediterranean.

### 2.2.3 *Legal elements of fisheries management in the western Mediterranean*

*Michel Morin, Saint-Nazaire, France*

The western Mediterranean, from the Straits of Gibraltar to the Sicily Channel, is legally distinct from other areas of the Mediterranean basin. In the Adriatic, fisheries management is less a Community question and more one relating to Italy and the states emerging from former Yugoslavia (and to a lesser extent Albania). Management issues in the Aegean also require specific attention given the dispute between Greece and Turkey over the enlargement of territorial seas around the Aegean islands to 12 nm.

Developing a regulatory system for the Mediterranean requires taking account of the specificities of this region rather than paying too much attention to the regulatory experience of the Atlantic and North Sea. Due to the narrow continental shelf demersal fishing is generally carried out near the coast and exploited by fishermen from neighbouring ports. Shared resources are few in the western Mediterranean. On this basis it could be argued that there is less obligation to define common rules for the sea.

The large tuna and swordfish fisheries, facing increasing fishing effort, have been subject to certain management initiatives. However, they are generally pursued outside of the 12 mile limits and juridically are high seas fisheries and therefore not subject to coastal state management or policing activity. It is necessary to call into question the status of such high seas spaces. Enlargements of national space are, however, made particularly problematic by the geography of the Mediterranean and its large numbers of islands. It is necessary, however, to consider the transformation of such areas into fishing zone status. Algeria and Spain have recently unilaterally set up such zones, though not in accordance with international law, and a similar experience can be found in the Baltic where states have agreed zonal boundaries.

Council Regulation 1626/94 observes that the Mediterranean lends itself less easily to the application of rules analogous to those applying in the Atlantic



and North Sea. But this does not necessarily mean that it is intrinsically more difficult to regulate the Mediterranean fisheries. In some ways it is less problematic given that there are few shared stocks and a tradition of strong involvement of professional institutions such as the *cofradías* of Spain, *prud'homies* in France and cooperatives in Italy.

Here the principle of proportionality is relevant, as codified in the Maastricht Treaty, which considers that Community actions should not go beyond what is required to achieve Treaty objectives. This requires a consideration of the allocation of responsibilities between the various levels (including the professional organisations) rather than a strengthening of regulation, and taking into account the variety of fisheries, juridical situations and institutional structures.

#### 2.2.4 *The Mediterranean regions facing the Common Fisheries Policy: regional politics and fishing policies*

*Juan Luis Suarez de Vivero, Mayca Frieyro, Juan Carlos Rodriguez and G. González, Universidad de Sevilla, Spain*

The full implementation of the CFP in the Mediterranean as far as the policy on fishing resources is concerned, is not a strictly technical issue referring to the feasibility of quotas and the TAC system. It is also a political one. Effective implementation requires the involvement of non-EU member coastal countries and third countries.

The EU as a political entity is just one component of a Mediterranean geo-political scene with a long and complex tradition. The feasibility and success of the CFP must be considered within the overall political-institutional framework. Several geo-political groupings can be identified based on common interests, ideological and cultural postures and shared histories, including Western Europe, the Maghrib, Maskrek-Middle East and the Balkans. Affinities and interests in the western Mediterranean have encouraged regional awareness and the establishment of political blocs, such as the EU. Two Mediterraneans are identified based on their political, strategic and socio-economic situations; a generally more developed and wealthy western Mediterranean and a socially and technically underdeveloped North Africa and Middle East.

Developing a new regional model for the Mediterranean is a necessity given increasing levels of catches, fishing effort and overexploitation. This depends on appreciating the physical traits of the area and its multi-species and high market value fisheries. The EU dominates catches in the region, followed by a group of countries comprising Turkey, Algeria and Egypt. Differences also emerge in the economic importance of the sector to GDP, the level of fish imports and fish consumption, though the lack of reliable statistics is a pervading problem.

Shifting the fisheries policy away from a summation of national policies to a more global regional approach requires political and institutional instruments and an ability to harmonise dissimilar positions. The General Fisheries Council for the Mediterranean, established with the objective of developing a rational management of fisheries in the region, is to become the forum within which to devise such a new management framework for fisheries and the political arena in which national and regional interests will be settled. Currently under reform, it will lose its links with the FAO and will be faced by membership of the EU. The new General Fisheries Commission for the Mediterranean is likely to be influenced heavily by the EU given the lack of political cohesiveness and economic weaknesses within the south shore countries. As the four EU states form the only cohesive political bloc within the region, the EU is in an advantageous position to implement the CFP and influence the development of a conservation policy for the sea as a whole.

### 2.2.5 *Discussion*

The discussion focused primarily on two issues related to the political framework of Mediterranean fisheries management. First, the logic behind the unilateral territorial extension of Spain into the Mediterranean was considered by some to be primarily politically motivated rather than being related to fisheries policies as such.

Secondly, questions were raised as to whether there were tensions between the EC and GFCM and as to a potential EU hegemony within the Commission. It was noted that the GFCM consists of 20 countries participating in decision making so it was unlikely that 4 member states could claim a case of hegemony. It was considered that the addition of the EC as a member of the GFCM was more likely to improve the means of operation rather than disturbing the decision making balance. It was also noted that the GFCM consists of countries facing a large number of different situations and priorities beyond the sphere of fisheries management, relating to human development, institutions, research capacity, economic and political organisation, public affairs and a number of latent territorial conflicts. This has significantly hampered the work of the GFCM in fisheries management, in particular with regard to the contribution of social sciences in decision making. However, it was stressed that this situation is likely to greatly improve under the ongoing reform process of the GFCM.

## 2.3 **The Black Sea**

### 2.3.1 *Introduction*

Due to the late withdrawal of a paper scheduled on Black Sea fisheries in the event only two papers were presented in this session. In the first *Oddmund Otterstad* reviewed some of the main developments in the Bulgarian fishing fleet following the collapse of a command economy and the transition to a market system. A number of possibilities for the future development of the sector were outlined. Secondly, *Kevin Crean* focused attention on the

application of planning techniques to the issue of multiple use conflicts and integrated management in the case of the Danube Delta.

### 2.3.2 *Fishing vessels in Bulgaria: adaptation to dramatic changes*

*Oddmund Otterstad, University of Trondheim, Norway*

The analysis of dramatic cuts in the levels of fishing activity is a highly relevant research task, given the global fish resource crisis. This crisis forces most fishing nations to implement dramatic policy measures in order to reduce the pressure on the fish resources and make their fishing industries more sustainable. In this connection the case of Bulgarian fisheries is an example requiring adaptation to extreme changes.

According to FAO statistics there have been major changes affecting the Bulgarian fishing fleet in the transition years since 1989. The figures for quantity of fish harvested by the Bulgarian fishing vessels show a reduction by c 80% from the average level in the 1980s to the average in the 1990s. This involved the total disappearance of the ocean fleet of deep sea trawlers and vessel owners have been forced to change their fishing strategies.

Little was done by the Bulgarian authorities to compensate for the total collapse of the industry. The developments are primarily attributed to the effects of international competition and to the change from a command economy to a post-communist situation comprising a completely *laissez faire* free market system, without social action on behalf of the state authorities. Other reasons related to the limited benefits offered by the new ocean regime and the effects of overfishing in the coastal fisheries.

Ignoring possible changes in exports and imports and in the percentage of human consumption of fish, the quantity of fish available for the Bulgarian population is one-fifth of the level they were used to during the Communist period. Nutrition problems are not yet scientifically documented, but the average quantity of fish consumed per capita has decreased considerably. In under 10 years a wholly different fleet structure has emerged. While the distant water fleet has disappeared new patterns of a fisheries system are emerging. Some fishermen have begun to work other vessels. The system is dominated by a small number of fish traders and entrepreneurs, some former fishermen. Several possibilities are identified for further development of the sector: the import of fish for consumption though this option is limited by low purchasing power; the import of fish into Bulgaria for processing and re-export; the development of fish farming; and diversification of the industry involving the combination of fisheries and tourism.

2.3.3 *Aquatic Resource Management Planning (ARMP): managing multiple user activities at the confluence of the River Danube and Black Sea*

*Kevin Crean, Hull International Fisheries Institute, United Kingdom*

The land-water interface has been the focus of intense development as areas of economic activity and the ideal location for the settlement and consequent expansion of human population. However these very attractions have conspired to cause problems as a result of uncoordinated developments, and interactions, between different sectoral activities. This has given rise to adverse impacts, and a plethora of problems that have often proved intractable. Agricultural and fishing activities have been caught up in this process, and in some locations are being marginalised and replaced by activities that have a greater impact on the environment.

There is a continued need to attempt to balance and moderate development activities. This poses a challenge because of the varied nature and rapid evolution of activities that originate in different and competing sectors. The challenge is to manage property rights and access conditions in a way that can balance and moderate the needs of different user groups whilst paying heed also to the requirements of the natural environment. More effective decision making tools are required that can prioritise across sectors and establish a balance of inputs to minimise adverse impacts.

The paper assesses the broad structure of the challenge posed by the rapid development of the water-land margins and examines the planning and development methodologies that are being generated in an effort to overcome some of the intrinsic sectoral conflicts. Examples include the river catchment planning methods in the UK aimed at rationalising demands on water resources through the modelling of all aspects within the aquatic ecosystem. Catchment plans represent a forerunner to other methodologies relating to integrated coastal zone management and EU demonstration projects aimed at drawing attention to the rapidly changing problems of the coastal zones. Parallel methodological developments have also been made in the planning of individual projects using project cycle and the Logical Framework approaches.

The opportunities are considered for applying an integrated planning and monitoring technique to the development and management of biological resources of the Danube delta in Romania and the adjacent Black Sea coast. The area, designated as the Danube Delta Biosphere Reserve, is of international merit in terms of conservation and biodiversity value and is subject to a range of economic activities including fish capture and culture, livestock production and tourism. The reserve management plan draws on principles of catchment and integrated coastal zone management, however, while offering significant benefits, there appear to be significant barriers to implementation. The Aquatic Resource Management Plan technique offers a way forward for planning, development and management of resources in a complex multi-user environment. This combines the broad sectoral strengths

of the catchment and coastal zone management techniques with more focused project cycle techniques.

#### 2.3.4 *Discussion*

Much of the discussion following the session referred to the appropriate institutional framework for integrated planning techniques as a means for managing multiple user activities. The challenges of developing an appropriate framework were acknowledged. In the case of the Danube Delta there are doubts over the likelihood of developing a sufficiently comprehensive approach to ensure success of the planning approach given the range of countries whose activities potentially impact on the system. International support and pressure was seen to be important but here there are questions relating to the legitimacy of pressure and as to how this can actually be harnessed in the institutional context.

### 2.4 **The central and eastern Mediterranean**

#### 2.4.1 *Introduction*

Three contributions focused specifically on the central and eastern Mediterranean. The first two, utilising experiences from Greece and Italy, considered multiple use conflicts and dealt with the positioning of fisheries in the context of coastal economies and development.

*Daoli et al.* analysed the particular relationship and antagonisms between the fisheries sector and the burgeoning development of aquaculture units through a case study of Aetoloakarnania in Greece. This analysis was complemented by *Gabriella Mondardini* who examined tourist development in Sardinia. In particular she addressed the impacts of tourism upon traditional fishing spaces and the potential for the emergence of common objectives for environmental protection.

In contrast, in the final paper of the session, *Katia Frangoudes* drew attention to local organisational structures in the shellfish sector of Greece. Case studies of fishing cooperatives in the Thermaïkos Gulf were used to explore the sociological and economic factors underlying differential outcomes of management.

#### 2.4.2 *Inshore fisheries, aquaculture and local development: trajectories of fisheries development and issues for contradiction and dispute in coastal Aetoloakarnania, Greece*

*J. Daoli, E. Daskalopoulou and A.G. Papadopoulos, University of Athens, Greece*

The prefecture of Aetoloakarnania in central Greece includes a large coastal zone and a significant fisheries sector. The evolution of new economic activities has led to a number of social tensions and conflicts over the

exploitation of inshore resources. The sector consists, on the one hand, of sustainable inshore fishing, characterised by extensive production techniques and low levels of modernisation and, on the other, an intensive 'productivist' exploitation of inshore resources by aquaculture units. The apparent contradiction between inshore fishermen and aquaculture units, especially in those areas which are more developed and where tourism offers an important income source for the local population, introduces a series of issues relating to local development, coastal zone management and the implementation of regional policies by the Greek state.

Inshore fishing is considered a traditional economic activity, although there are some development potentials for fishermen who exercise more capital and labour intensive fishery techniques. In contrast, the large number of aquaculture units that have set up in the area are characterised by modern, highly competitive and export oriented, activity. They represent important development potential for the prefecture's economy which is classified as a lagging region.

Each activity relates differently to local economic, social and environmental conditions and assumes a different relationship with the coastal locality. Although both kinds of activity provoke contradictions and conflicts in relation to sustainable use of inshore resources in the prefecture, these are informal in character and can be traced at the local level. In fact, the social issues related to the co-existence or antagonism of the two confronting economic activities in the coastal zone are not well understood.

In Greece, the lack of an institutional framework to regulate inshore fisheries is not unrelated to a general lack of spatial policies for the management of coastal zones. Where development is a primary regional goal the regulation of economic activity appears to favour more productivist positions rather than sustainable outcomes or non-productive objectives relating to the environment. In part this reflects differing levels of organisation between fishermen and aquaculture enterprises.

#### 2.4.3 *Fishing and tourism in the Mediterranean: Sardinia*

*Gabriella Mondardini, Università Degli Studi di Sassari, Italy*

It is impossible to understand the socio-cultural situation of fishermen without considering the tourist phenomenon. Tourism has become an important source of economic development for many Mediterranean states, including Sardinia. Here there has been a progressive development of the industry since the 1960s with an increase in hotel accommodation and related developments. Most development has been focused in the coastal resorts from Alghero to Olbia.

At the same time, through processes of induced urbanisation, growth in pleasure crafts and increased pollution, tourist development has had negative impacts on the shore and sea environments. Small scale fishing enterprises have also modernised their fishing techniques to become more efficient and

they, too, have created environmental imbalances that put at risk their livelihoods through overexploitation of resources. Governments have an urgent duty to cope with this situation.

The question arises as to whether it is necessary to consider the coastal environment as disputed between fishermen and tourists, or whether both interests can share common objectives for environmental protection. Fishermen and tourists share the same aquatic space and times of activity, with both positive and negative effects on fishing activity. Potentially, tourism and fishing are mutually beneficial activities. Increased tourist activity will, for example, lead to an increased demand for fresh fish.

There are intense conflicts, however, between professional fishermen and amateur tourist fishermen, leading to a defence of fishing territory. Tension is greatest during biological stop periods when sports fishermen continue to fish. Fishermen are, however, a weak professional group and the institutional response appears to be tempered in favour of tourist development. During the summer months there is also a removal of workers from fishing into the tourist sector, at a time when fishing labour is in most demand and prices high.

Finally, crucially there is a clash between fishermen and tourists over port space and some landing places have been installed exclusively for the use of tourists. On the other hand some tourist port development has offered fishermen new resource exploitation possibilities through improvements to harbour structures and new anchorage locations. This has, however, led to a partial detachment of the fishermen from their traditional places of activity, distribution channels and storage facilities. The cultural distinctiveness of some coastal centres has also eroded through a process of urban decentralisation of local dwellers.

#### 2.4.4 *Shellfish management in the Thermaïkos gulf*

*Katia Frangoudes, OIKOS, France*

In Greece there are two kinds of professional organisation: cooperatives, oriented to supply and marketing functions, and associations, which aim to represent and defend the interests of fishermen. Both have a legal status based in agriculture and are federated at regional and national levels. In some locations the association role is performed by the cooperative.

The Thermaïkos Gulf is a region rich in shellfish production, including target species of flat oyster, bearded horse mussel and the recently developed diver fishery for warty venus. Those coastal fishery cooperatives characterised by shellfishing activity are specialised to differing extents in the different species. Cooperatives have the exclusive marketing right to their respective fisheries under the *misthossi* system, subject to a levy of fixed percentage of sales. In the case of flat oysters, exploited by two cooperatives, management systems have been successfully introduced to guarantee long term revenues from the

stocks. By contrast, the attempts to safeguard the warty venus stocks by a third cooperative have failed to achieve their objective.

Recently the fisheries have become a centre of conflict and competition between fishermen exploiting different stocks by different methods. For example, reductions in oyster production have been attributed to the intensification of warty venus fishing. In response, oyster and mussel cooperatives in Krini and Chalastra introduced oyster and mussel quota limits in an attempt to conserve stocks. Despite difficulties arising from those individuals outside of the cooperative who are not subject to the management regimes, the combination of the exclusive right of commercialisation and quota management system is considered the best approach for stock protection.

Attempts at stock protection by the warty venus cooperatives of Michaniona have been less successful and have not incorporated quota limits. Here the exclusivity system refers only to trade rather than stock exploitation. Some individuals have been able to transfer production into aquaculture to avoid *misthossi* limitations. The cooperative exclusive rights have also been contested by local fish mongers who have responded by supplying buyers through aquaculture and through offering buyers control of aquaculture units. This situation has created conflicts among cooperative members and social relations within villages. Within the fishery there has also been a reluctance to accept any reduction in activity or quota limits. In part this is attributable to the dependence on warty venus as the main source of income, compared to the Krini fishermen who target other fisheries. The warty venus fishery may also represent an opportunistic activity carried out by those attracted by high levels of income, with fewer concerns for the long term future of stocks.

It may be supposed that the decision to allocate marketing rights to the Michaniona cooperative was motivated by its potential to create a quota system. There seems, however, to have been an underestimation of the sociological and economic determinants of such a collective agreement.

#### 2.4.5 *Discussion*

The discussion which followed the papers on the eastern and central Mediterranean focused primarily on three main issues.

Firstly, consideration was given to the strategies of professional fishers and their families in adapting themselves in the face of tourist development and the extent to which they have been able to diversify their activities. In the case of Sardinia there is generally a low level of organisation among the small scale fisheries and fishers have generally not developed alternative solutions, instead favouring some form of political intervention or support. Fishing tourism is also often perceived negatively and as a potential contributory factor in the destruction of fishing culture. The preference is for the maintenance of fishing employment as the basis for the survival of fishing culture. Some further consideration was also given to the antagonisms between aquaculture and fisheries in Greece and notably with regard to the competition for local



markets following a reduction in the price of aquaculture produce. The main areas of conflict are found in more developed coastal areas where there is considered to be lack of coastal zone planning.

Secondly, attention focused on the range of local fishermen's organisations in Greece and their relationship to local, regional, national and European levels of administration. In Greece local organisations primarily include cooperatives and associations. Both fulfil similar roles in representing the fishermen. Their relative success, and the strength of their relations with the administration, was seen to vary from region to region. One notable characteristic is the close relationship between the fisheries and agricultural sectors, where fishing and farming cooperatives are organised within the same federal structure.

Finally, consideration was given to the role of 'amateur fishermen' in the coastal zone. This term was seen to embrace a wide range of groups including part time, seasonal and recreational fishermen. All these groups potentially form an important part of the integrated economy of coastal areas which are often considered underprivileged in terms of alternative occupational opportunities. In the case of Greece, the fishing sector cannot be separated from other sectors. Here, the ideological discussion of who comprises a fishermen is repeated in the case of farmers. The categories are not clear and this is reflected in different statistical estimates of fishing employment. Amateur fishermen clearly need to be considered within the overall prospects for development within the coastal zone but attempting to define and delimit the sector is a significant challenge. At the same time, while there are tendencies towards specialisation and divisions of labour, which separate out agriculture, fisheries and tourism activities, this can only be taken so far in terms of regional development. There comes a point when the development potential of an area maybe sacrificed by excluding the importance of amateur fishermen. The central question is how to regulate this sector and how to integrate it into the regional economic equation.

## 2.5 Political and social regulation of fisheries in southern waters

### 2.5.1 Introduction

Social and political regulation of fisheries in southern waters is performed on a range of levels and includes international, national and local approaches. The five contributions which formed a basis to this session were seen to cut across these different perspectives.

The first two papers addressed the macro-institutional and political characteristics of regulation of fisheries in the Mediterranean. The contribution of *Ernesto Penas Lado*, invited speaker from the fisheries directorate of the European Commission, framed the debate through providing an overview of the application of the Common Fisheries Policy to the Mediterranean. He outlined the specific characteristics of the region, the effort to date in applying a common policy to the sea and the need for international cooperation. His analysis complemented that of a second invited speaker, *Christophe Breuil* of

the fisheries department of the Food and Agriculture Organisation, who addressed the role of the GFCM in Mediterranean fisheries and outlined the main features of its current reform process. The GFCM also formed the central focus of the third contribution, although from a national perspective. This was provided by *Juan Antonio Camiñas* who gave an overview of the implementation of GFCM regulations in the context of Spain.

The remaining two papers within the session both focused on the role of local organisations in social and political regulation. *Juan-Luis Alegret* reviewed the evolution of the relationship between user group organisations and public bodies in Spain. This development has culminated in the most recent phase which is characterised by co-management involving local *cofradias*. Finally *Jose Pascual*, switched the geographical focus to consider local organisation and participation in the Canary Islands. He considered some of the main constraints which prevent a more integral role for the *cofradias*.

### 2.5.2 *The Common Fisheries Policy in the Mediterranean*

*Ernesto Penas Lado, European Commission, DG XIV*

The application of the Common Fisheries Policy to the Mediterranean must take account of a number of specific characteristics including, the narrowness of the continental shelf, the limitation of coastal state sovereignty to 6 or 12 rather than 200 nm, high species diversity, a fishing industry structure dominated by a large number of vessels landing in many small ports, and a deficiency in research and management, *inter alia*. As a consequence of the absence of a 200 mile EEZ, the usual distinction in the Community's management between 'internal resources' (those occurring within the EEZs of Member States) and 'external resources' found in international or third country waters cannot operate in the usual way. In effect practically all demersal and pelagic stocks are straddling stocks and therefore subject to international management.

Of the three main strands of stock conservation policy - catch limitation, effort limitation and technical measures - only the last named applies in the Mediterranean and that has been introduced as recently as 1994 (Council Regulation 1626/94). However, the structural and marketing aspects of the CFP do apply to Mediterranean Member States. The multi-species nature of Mediterranean fisheries makes it difficult to adopt TACs and quotas as management tools. Control procedures are poorly developed in the region. Agreements with third countries within the Mediterranean, granting EC vessels access to third country waters, have not been made since even those countries with more extensive continental shelves have so far not declared an EEZ beyond the 12 mile limits.

It follows that the present and future application of the CFP in these waters will be a rather unique mixture of internal Community rules and multilateral rules agreed by the two international organisations with competence over Mediterranean fish stocks *viz* GFCM and the International Commission for the

Conservation of Atlantic Tuna (ICCAT). Reinforcement of the role of the GFCM as the only organisation which includes virtually all the region's coastal states is particularly important. The Scientific Advisory Committee established in October 1997, which provides a framework for scientific management advice, has a key role to play in guaranteeing the future conservation of resources.

The future development of the CFP within the Mediterranean region will have to balance the need to take account of the natural, socio-economic and political specificities of the region with that of ensuring an equitable harmonisation of technical measures as a means to closer integration. The development must also heed the fact that many of the countries bordering the Mediterranean are developing countries with poorly adapted economic structures and few means to undertake effective fisheries management. International cooperation, with both bilateral and multilateral agreements, represents the way forward.

### 2.5.3 *The GFCM in the management of Mediterranean fisheries*

*Christophe Breuil, FAO Fisheries Department*

The Mediterranean displays several natural features that have influenced the evolution of fisheries exploitation and management. Human factors, related to the particularly rich history of people in the region have also conditioned this evolution and, together with the specifics of the fisheries and the international legal regime of fisheries exploitation in the region, these must be taken into account when devising fisheries management strategies. A significant part of the resources are transboundary, and this requires an international legal framework for their exploitation and management.

The GFCM constitutes the main institutional framework for cooperation, which aims to promote the development, conservation, rational management and best utilisation of living marine resources. While the role of the Commission has remained largely consultative, several recent measures would demonstrate its current tendency to perform increasing decision making functions.

Prior to the reform of the 1990s, the decision making process within the GFCM was based mainly on advice from its Committee on Fisheries Management (based on the results of expert governmental consultations on stock assessment) and an Executive Committee. The Working Party on Fisheries Economics and Statistics (WPFES) was less involved, and thus the normative approach to fisheries management within the GFCM was mostly based on biological considerations.

Since its creation in 1949 the GFCM has been subject to several reforms to match the continuously changing context of fisheries cooperation. The recent and ongoing reform of 1997, which was initiated at the end of the 1980s, is likely to be the most important. Its purpose is to create the necessary political and institutional conditions to enable the GFCM to strengthen its role in the

management of Mediterranean fisheries. It was motivated by the need for greater financial flexibility, the pending membership of the European Community within the Commission, the need to improve institutional functioning and in order to introduce new conceptual approaches to management. The major fisheries management strategy option within the GFCM is to promote the establishment of fishing effort control mechanisms at the most appropriate level in terms of stocks and/or sub-regions, as opposed to mechanisms based on direct control of catch.

Results of the reform include the possibility of membership of the GFCM for regional economic organisations like the EC, the abolishment of the Committee on Fisheries Management and its replacement by a Scientific Advisory Committee (SAC) concerning biological, social and economic aspects (thus separating consultative and decision making activities), the establishment of a new Committee on Aquaculture in place of the Executive Committee, and the establishment of an autonomous budget. Social sciences are also likely to play a greater role in decision making in future through subsidiary bodies to the SAC.

#### 2.5.4 *Fisheries management in the Mediterranean Sea: from GFCM recommendations to its application: the Spanish case*

*Juan Antonio Camiñas, Puerto Pesquero, Málaga, Spain*

Fisheries management in the Mediterranean is based on the individual management system of each coastal state, together with GFCM recommendations and their application at national level. Mediterranean countries are therefore in a position to implement more restrictive regulations to protect fisheries resources within their economic zones and wherever their national fleets are operating.

As a supra-national entity the GFCM encourages the development, conservation and rational management of living resources. Its role is clearly defined as an organisation responsible for the management of the resources by the formulation and application of measures and recommendations. From this perspective, it seemed that the capacity of the GFCM to formulate management measures would produce substantial changes in the joint action of Mediterranean fisheries. However, members of the Commission can, within 120 days of the notification of a recommendation, present objections and opt out of any responsibility. As a result, the implementation of many of the GFCM recommendations among its members has been prevented. In addition, the application of management measures refers to jurisdictional waters and in general only apply to 12 nautical miles. Consequently, there is an extensive area in which these recommendations of the Commission are ineffective.

A review of GFCM recommendations and their application to Spanish legislation shows that Spain adequately implements GFCM recommendations, either because they were previously incorporated into national measures or, as

a member of ICCAT, the recommendations of the Commission were implemented before being accepted by the GFCM.

The Spanish situation cannot be generalised to other members of the GFCM, as can be inferred from the reiteration of some of the recommendations, and the creation of the FAO-COPEMED Project, financed by Spain, which aims to facilitate the accomplishment of the recommendations of GFCM in the western Mediterranean. The incorporation of Japan and the European Union into the GFCM and the general transformation of the Commission, could lead to a change in scope in the near future.

#### 2.5.5 *Space, resources and history: the social dimension of fishing in the northwestern Mediterranean*

*Juan-Luis Alegret, Universitat de Girona, Spain*

The paper highlights the interactions between the occupation of maritime space, the exploitation of fishery resources and the historicity of these activities and indicates the challenges posed for fisheries management. The long history of human occupation of the Mediterranean coastline makes the maritime space more than a legal or economic zone, but also a space for relations and social identity which are difficult to manage from an exclusively economic or ecological perspective. The social dimensions must be fully taken into account in fisheries management and this may call for solutions unlike those normally found in other fishing regions.

The relationship between user and public bodies has evolved over time in the northwest Mediterranean. In Spain this has meant different management approaches and for communities, different roles and protagonists. From a situation of community based fisheries resource management, characterised by the *cofradías* and Guilds of the Middle Ages and beginning of the Modern Age, the situation changed at the end of the 18th century to a system of co-management between the Guilds and the State. This was associated with a reduction in the power of the Guilds and the introduction of new fishing methods by outsiders, which were opposed by the Guilds for ecological reasons but supported and regulated by the state for developmentalist purposes. This system prevailed until the second half of the 19th century with the abolition of the Guilds through capitalist liberalism. The State was left as the only manager of the resource until the second half of the 20th century.

Following the Franco dictatorship, a model of neo-corporatism and co-management was established with the reimposition of the *cofradías*. These had a legal status as corporations under public law and co-management functions that were clearly defined by the state. They integrated aspects of community based resource management within the co-management structure and thus had greater legitimacy as organisations and greater adaptability to the diversity of ecosystems and forms of exploitation. By imposing upon the *cofradías* the character of public law, the State institutionalised its intervention in the sector,

while at the same time maintaining the welfare and mutual benefit aspects of the earlier organisations, now, however, with political mediation.

A system of co-management has been maintained to the present day within the context of the 17 autonomous regions. This is based essentially on the control of effort and first sales in the auctions. They persist despite the aim of transforming the *cofradías* into producers' organisations, promoted by the EU, in order to allow the market to play a more relevant role in the management of the resource.

#### 2.5.6 *Fishermen participation in the management of the artisanal fishing in the Canary Islands*

*Jose J. Pascual Fernández, Universidad La Laguna, Spain*

Several factors have increased the pressures on marine ecosystems exploited by artisanal fishermen in the Canary Islands. In addition to the general transformation of the shoreline by human development and the related emission of contaminants, regulation and control of fishing activity have been inadequate. It has been based on incomplete information given the large number of fishing ports, frequently changing fishing techniques and informal marketing channels. In addition, responsibility is divided between central and regional administrations and there have been general difficulties of enforcement associated with an island territory.

*Cofradías* are non-profit corporations with public rights which aim to represent the interests of the fishing sector and act as consulting organisations. They are enabled to perform economic, administrative and commercial management tasks and frequently cooperate in the regulation of access to resources. The comparative relevance of the 27 *cofradías* in the Canaries varies given membership numbers, fleet sizes and facilities.

Participation in resource management by the fishing communities, through the *cofradías*, has been generally scarce in most cases because of their innate weaknesses. The fishing ports' reduced dimensions and fragmentation meant many *cofradías* had less importance and a deficient practical functioning. Some have been exploited by individuals in order to defend their interests and varied strategies among the fishing populations have also promoted conflicting positions; although the Canary administration is attempting an increase in the fishermen's participation in the *cofradías*' management and a reinvigoration of their boards of directors through elections. *Cofradías* in the Canaries also appear to face greater difficulties in daily surveillance of fishing activities compared to other areas such as Catalonia, as the former are unable to regulate time spent at sea or fishing effort.

*Cofradías* have played a specific and relevant role in artisanal fisheries management off the coast of the Canaries. Within several fishing communities *de facto* restrictive mechanisms have been developed which limit the use of several fishing techniques and which in some senses restrict the use of the

resources to members of the local communities. In the more significant cases, this local management occurred prior to the existence of the *cofradías* and in fact conditioned the *cofradías*' institutional position. However, several factors make the functioning, development and survival of the *cofradías* in the Canary Islands difficult. Having been created in a context when fishing was sometimes the only alternative, nowadays fishing is less desirable in contrast to tourist development and young people have abandoned certain areas of the islands in favour of employment in hotels, construction or other service related activities. It is likely that the transformation and adaptation of *cofradías* will continue. This will probably lead to a reduction in the overall number of institutions.

### 2.5.7 Discussion

Much of the discussion revolved around the historic origins of local organisations and the availability of documentary evidence to support such studies. The need was identified for an improved archaeological orientation, involving a reinterpretation of archaeological evidence to consider the links with the appropriation of the sea. Some consideration was also given to religious influences upon the development of ancient fishing fraternities and brotherhoods.

Attention was focused on the possibility of the European Community financing the constitution of an association of fishermen's organisations from all Mediterranean coastal states, to enhance cooperation and participation in management by professionals, and taking into account cultural and fishing histories. Some concerns over progress were expressed, given the experience with producers' organisations in the region and the potential problems in finding appropriate organisations of fishermen within the four EU Mediterranean states and from both the north and south Mediterranean shores. These states display considerable heterogeneity in professional organisations. Nevertheless some opportunities had been created for professionals to give opinions, notably a special *ad hoc* Mediterranean group set up within the Advisory Committee of Fisheries.

The European Community's future structural policy towards the small boat sector in the Mediterranean was also raised. It was noted that the development of the MAGPs was not under the control of an individual group or organisation. They were the result of a negotiation process, influenced by the European Commission, where discussions by Member States were vital. For the small boat sector it is likely that Member States would have greater freedom and responsibility in managing fishing capacities within their territorial waters though it was difficult to predict what Member States and the Council of Ministers would decide. The control of small coastal fisheries was unlikely to succeed within a uniform, comprehensive and global approach for the whole of Europe. Future objectives for the small boat sector may vary for nations, regions and sub-regions according to different political and society choices.

Finally, attention was drawn to the possibility of creating sub-regional areas for the implementation of the CFP in the Mediterranean. It was noted that EU fisheries management policy would be carried out within the framework of the GFCM. A regional policy within the GFCM might be envisaged for particular Mediterranean regions such as the Adriatic or Alboran seas.



## 3.0 Analysis

### 3.1 Introduction

This section of the report contains the commentaries from three rapporteurs, presented in the form of extended summaries (3.2-3.4), a summary of the discussion from the concluding plenary session (3.5) and a brief overview of the proceedings (3.6).

### 3.2 *Rapporteur I: Apostolos G. Papadopoulos, Institute of Urban and Rural Sociology, National Centre for Social Research (EKKE), Greece*

#### *Towards an essentialist policy agenda for Mediterranean fisheries management*

I will adopt a critical stance with regard to what I have read and heard during this workshop. I will also deal with some emerging issues arising from my own reading of the papers presented. I am sociologist and thus will deal with the fisheries sector in its specific social context. It is an issue which has emerged strongly from a number of papers presented. As a sociologist I will not separate economy from culture and polity. This attitude will allow for a more qualitative reading of the trends and characteristics.

The contextualisation of analysis concerning fisheries is the means to 'sensitise' our analysis. It has to do both with the intended and unintended consequences of actors and factors which are not necessarily related to fisheries. *Van Ginkel's* contextualisation of fisheries with respect to three factors is an extremely useful attempt. He refers to diversity, complexity and dynamics as factors that increase uncertainty and which can interfere with management objectives and pose barriers to governance structures.

In my view, fisheries in the Mediterranean has different connotations to those concerned with the Baltic Sea or the Atlantic Ocean. Most of all, the Mediterranean may be considered in a geo-political sense, but also as a diversified zone with diverging patterns of social and economic development, but sharing similar patterns of social organisation and social change. Braudel's view of the Mediterranean directs us towards historic-social patterns of social and economic development which are relatively distinct from the western or central European ones.

The reference to cultural types of fisheries management by *Hoefnagel*, may give rise to different interpretations and discussions on the relative value of the characteristics which are included under the label 'culture', but in fact sensitises us to the fact that co-management - if this would be the aim - can be designed differently in each case. In addition, it may well be that a 'family model' (as a construct) may imply a divergent formulation or procedure of providing an institutional framework which will be sensitive, for example, to 'amateur fishermen'. It may include a series of 'drop outs', 'miscellaneous' or 'non-classified' groups which are one way or other included under the

fisheries label. What is more, this label captures different meanings which do not necessarily coincide with a 'fisheries culture'. Even this culture is considered differently and is in fact part of the 'national culture'. Even more, at the European level, fisheries management may contain contra-national elements which can produce unintended outcomes. Hoefnagel's call to 'know more of fishermen cultures and their scores', implies that a score can be calculated. But even if this is so, it is necessary to add another important dimension, the 'polity'. The polity dimension refers to the specific articulation of the socio-economic and the political sphere. It brings us back to the Braudelian (historic-cultural) re-thinking of categories and social processes.

Then comes the question of the role of politics within a European level fisheries management framework. The European fisheries measures are, as *Suarez de Vivero* and colleagues stress, not a strictly technical issue. It is undoubtedly a political one. A European fisheries management for the Mediterranean refers to the implementation of a series of technical, legal and socio-economic measures in the Mediterranean countries. But this implementation process implies a whole 'culture' of intervention at all administrative or geographical levels (i.e. regional, sub-regional, national). The so-called 'diversity' of countries in the Mediterranean', which actually hinders the development of a fisheries policy in the area, may lead to a re-consideration of the very prerequisites of such an attempt. Therefore, I am not so sure that some 'modernisation' attitudes and measures to be applied in the fisheries sector are actually leading to a sustainable fisheries sector in the Mediterranean.

For the perspective on the socio-economic development of the so-called 'southern Europe', I am taking for example the discussion which may be developed upon the arguments posed by *Mondardini* on the relationship between fisheries and tourism in Sardinia. Apart from the existing or potential conflicts among professional and amateur fishermen, between fishermen and tourist operations etc., there is another aspect, that of the adaptation of the local population under the newly formulated conditions (the development of tourism in the area) and the depiction, conjugation or integration of fisheries, tourism and natural resource protection. Inshore fishermen integrate different socio-economic activities, thus responding to social change and to the all-encompassing trajectories of the European integration process.

It may well be in the case of Greece that this 'multi-sectoral' approach to employment and to economic development is an old strategy. It may be that resistance of the local coastal populations against 'common fisheries policies' comes through 'adaptation', through formal subjugation, but also with informal or essential autonomy. In this connection, I would refer to *Jose Pascual's* paper that notes that 'the possibilities the administration has of establishing a real control of the coasts and platforms are minimum as the fishermen are capable of developing a great diversity of strategies to deceive the surveillance'. I agree with his remark that 'the capacity of developing a co-management system depends upon the predisposition to do so and on cultural and ideological reasons'.

Thus, far from a discussion of the legal or regulationist arguments of fisheries management in the Mediterranean, I believe that an essentialist discussion should precede. One way or another, it is the issue of polity which predominates in my thinking and I think it will offer a great deal to discussions related to management issues in the Mediterranean. The spatial and historical angles of a possible agenda for formulating management issues for the fisheries sector in the Mediterranean emerge in a number of Spanish papers which, in their case for mainly historical reasons, are in the position to establish a version of co-management which is shared between the state and the *cofradías*.

Although the Mediterranean does not converge to a single pattern, one should examine the full set of emerging societal, economic and political patterns in order to come up with a realisable policy agenda for fisheries management in Mediterranean.

### 3.3 *Rapporteur II: Jan Kooiman, Amsterdam, The Netherlands*

In this contribution I will offer a conceptual framework on governance in which I will position a number of insights I received from this Workshop. This framework is called 'social-political governance' because I see it as an important, may be even the central, aspect of governing that attention is given to the relation between the social and the political, and between those governing and those governed. The background to this is that many policies (including fisheries) seem to fail, because they do not phrase problems they want to address properly. The basic assumption in conceptualising governance is, and what *van Ginkel* also expresses in his paper, that insufficient recognition is paid to factors such as the diversity, dynamics and complexity of the modern world.

We as scientists do not always offer the adequate tools to those who govern, because we also often see the world as too simple, too static and too uniform. In this void, social-political governance theory tries to formulate some general insights and in this contribution I will try to order some of the insights of this meeting in these terms, that is to say how they might fit into such a conceptual framework. Thus specific ideas and notions developed in this Workshop might be generalised into coping with problems in fisheries in Southern Waters or help in creating opportunities for these fisheries.

#### *Systems aspects*

The first conceptual distinction is in terms of the diversity, dynamics and complexity of Southern Water fisheries, or in other words, how these fisheries can be looked at as a system. *Van Ginkel* offers useful ideas in this context. He shows quite clearly the need for a 'coherent sensitising framework' in which to analyse human-nature interactions in fisheries and the need to take the diversity, dynamics and complexity of these interactions not as 'nasty complications', but as central components in such analyses. He talks about the 'reduction' of the complexity, dynamics and diversity of fishermen's

behaviour by the tragedy of the commons paradigm, and how a whole set of governing measures and instruments are based on such simplifications. A particular shortcoming of policies based upon these simplified images is the neglect of the adaptive nature of this behaviour in relation to policy measures.

Aspects of the diversity, dynamics and complexity of Mediterranean fisheries are shown in many of the papers. *Otterstad* provides a good example of taking dynamics seriously by showing how the dynamics of the behaviour of Bulgarian fishermen interact with the collapse of the communist system as a pattern of social-political interaction and politically as a 'command and control' mode of governance. The collapse of this system and its rapid change into a *laissez-faire* approach had fundamental effects on the whole industry. But did any 'policy model', based upon linearity of policy processes, predict such non-linear developments?

In general terms it is of great importance that governing models or policy measures 'fit' the systems they are considered to influence. To do so, a first need is for studies to show what the basic elements of such systems are. Here the paper by *Suarez de Vivero* and his colleagues is a good example of a study which takes the complexity, dynamics and diversity of Mediterranean fisheries into serious consideration. Papers like this are an important building block for governing models which fulfil this 'fitting' requirement.

### *Interactions*

Three basic elements can be distinguished in the patterns of governing interactions: images, instruments and action potential.

*Hoefnagel* shows how images, as an integral part of culture, fit into the governance of fisheries. In her interesting contribution she shows the importance of images for governance, and in particular how diversity in culture might not only explain how management styles in fisheries can fit with national or sectoral cultural types, but also how this could help in selecting proper ways of governing which fit certain cultural situations. What might be very functional in one country, or one sector, might be completely dysfunctional in another situation. Studies like this offer opportunities in which socio-cultural approaches might help in formulating hypotheses to define where schemes such as co-management, but also mixes of co-management with more traditional hierarchical governing styles, might 'work' and where not. There is so much emphasis in the analyses of fisheries and fisheries management on structure, and so little on culture, which might be the more important explaining variable for fishermen's behaviour in relation to governing measures.

Many of the papers illustrate the instrumental and organisational aspect of governing. *Morin* shows quite clearly how legal instruments might be used, but also what the limits are in their application. It struck me that although legal instruments are often used to formalise an already existing situation, moves to establishing fishing zones by Spain and Algeria can be looked upon as

'invitations' to others to react in an otherwise probably quite static situation. As such the application of certain instruments - if they are applied with care - can help to 'dynamise' fisheries governance, where this might be needed. *Morin* proposes that a whole set of new interactions might evolve from such an 'invitation' and in particular his views on 'proportionality' as a principle not only to define balances between states and their interests but also between public and private interests seems an important idea.

A second example to be mentioned is *Crean's* exposition of the use of management planning in the Danube and Black Sea area. Planning for many years has been a favourite governing tool, but lately has somewhat received less attention. However, he shows that in complex situations planning methodologies might be used in areas, such as water-land interfaces, to clarify all the complexities, dynamics and diversity of aspects and interests at stake. However, the paper also indicates that such planning methodologies have limitations when it comes to implementing them. In particular the political institutional support in balancing the interests involved is a precarious element in planning although it is often considered to be only of secondary importance in planning model building.

Thirdly there is the action element in governing. Here *Jose Pascual's* paper on the management of fisheries in the Canaries sheds much light. Not only does he show how *cofradias* as modes of fisheries management are embedded into a whole set of social-political customs and have long historical roots, which partly explains their viability as a management institutions, but also how, at least in the case of the Canary Islands, actions of the regional government partly renovated this established form of user group management. The study, however, also shows how this renovation may create a whole set of new situations and even paradoxes, such as the inability of those institutions to create their own 'legitimacy', being unable to elect their own 'governors'. This might be temporary, but shows how important the potential dynamic forces are in social-political interaction patterns.

### *Governing orders*

Three governing orders can conceptually be distinguished. In first order governing the question is how to solve concrete day-to-day problems or to create new opportunities. In second order governing we give attention to the institutional settings in which these first order governing interactions take place. Thirdly we have meta-governance in which the more fundamental questions of governing are asked, such as who governs the governors, and what kinds of basic normative qualities do those governing want to have.

In this respect *Rey et al.'s* paper is interesting because it develops some systematic ideas on a coherent contextual framework for management problems in fisheries. In part their scheme of nature-society interactions does conceptualise the different subsystems in terms of their overlap and the context of concrete problem solving in fisheries. I find it very instructive as a way to 'complement' a rationalist revision of fisheries management with a more

systemic one. On a macro-meso level it structures the context of problem solving and opportunity creation very well.

Other empirical contributions can also be mentioned such as the case studies on Greece and the one on Sardinia. Each shows clearly how management is concerned with governing interactions and how closely related problem solving and opportunity creation might be and how a problem in one perspective can be looked upon as an opportunity in another.

The case studies by *Daoli et al.* and *Frangoudes* give a very clear picture of the issues involved in governing needs arising from the interaction of traditional and modernising tendencies in Mediterranean fisheries and aquaculture, and the possibilities and limitations of problem solving on a micro and meso level. Also, the study by *Mondardini* gives an interesting illustration of the interaction between different sectors (tourism, professional and amateur fisheries), but looked at from an opportunity perspective we can also see what good governance of such interactions might mean for the interests of all involved, and not only of one group or interest.

All these studies show that governing interactions in the different orders is not an abstract use of concepts but that there are concrete and generalisable patterns of cooperation and conflict in very concrete situations.

Finally there is the meta aspect. What are the 'principles' governing fisheries and what level are these principles applied? In many respects *Collet's* paper gives a number of very valuable insights into the kinds of governing issues at stake here. His treatment of the Mediterranean as a 'fishery of many boats', with its remarkable adaptive capacity over time and an inherent 'logic', is in this respect very valuable. Not as a 'romantic' meta consideration, as he calls it, but as a viable and probably much needed opportunity! His plea for a new partnership between public and private forces, between state, market and civil society is an indication of the importance of such meta considerations in governing Mediterranean fisheries.

#### *Conclusion: social-political governance*

- \* conceptualised as social-political systems in terms of their diversity, dynamics and complexity; it is essential to develop conceptual and empirical insights into the diversity, dynamics and complexity of social-political Mediterranean fisheries;
- \* social-political interactions, conceptualised as images, instruments and actions; there is a need for new forms of governing interactions on the micro- meso- and macro-level of Mediterranean fisheries;
- \* conceptualised as social-political orders; there is a need for studies on problem solving and opportunity creation in their institutional contexts;

- \* conceptualised as institutional modes of governing; we need more knowledge of the complementarity and conflictual qualities of different mixes of modes of governance;
- \* meta-governance; we need to strengthen normative political and management discussions on the governance of Mediterranean fisheries.

3.4 *Rapporteur III: Torben Vestergaard, Department of Ethnography and Social Anthropology, University of Aarhus, Denmark*

Despite the variety of papers given, the Workshop had identifiable general themes and trends that seem to follow from the particularity of Mediterranean fisheries as well as from a general trend towards more inclusive perspectives in management research and practice. There was a marked call for context sensitivity, how to take the particular situation of Mediterranean fisheries, especially institutional traditions involving rights and obligations, into account in future fisheries management. Some papers (*Collet, Alegret*) made it abundantly clear that we are dealing with Old World situations characterised by the presence of institutions originating in earlier periods of history. There was a concern to protect, utilise or reach some compatibility with existing orders in the design of new management systems.

The focus on the particularities of the Mediterranean situation involved a more extensive selection of factors to be part of the management issue than we are accustomed to in northern waters. This may in part be due to a contrasting logic starting from a view of northern fisheries as more simple and ordinary. Justified or not, neoclassical models and solutions assuming the absence of society, apart from market and state, seem to figure more prominently in Northern European fisheries debate than they did in our Mediterranean Workshop. The Mediterranean appears to be special with its manifest presence of local management institutions, its narrow shelf, many species, international waters and large number of small scale fishermen. But a wider delimitation of system has implications for the 1) scope and 2) type of model that can represent the object of management.

*Scope of model* is taken to refer to the inclusivity of the system it represents, and the scope changes when not just stock, but ecosystem, social institutions and political situation are included in the field of attention.

*Type of model* is taken to refer to how the nature of the system is represented. The conventional models of system in fisheries are linked with a scientific tradition dealing in generalised equilibrium models that refer to quantifiable facts. To generalise and quantify implies a reduction of particulars and a decontextualisation. Thus, the call for context sensitivity necessarily implies a change towards more particularised models with more facts of a qualitative kind, and where even values must be taken into account as facts.

Extending the scope from stocks to ecosystems and institutions implies that quantitative equilibrium models do not easily serve the purpose of representing

the facts, if they ever did, given that stocks are constructions in the first place. Extending the scope and including more context seems to mean that we lose generality. This problem was acute for the contributions recommending that culture or institutions be taken into account in management design.

Taking cultural differences or local institutions into account suggests differentiated management. This is a problem in relation to the practical and political desire for general rules. When we extend the system from stock to include ecosystem, economy, institutions, culture, values *inter alia*, and when we take some form of sustainability to be the general goal, we are in serious problems concerning systems delimitation. There is no naturally given unit to maximise sustainability for. The Mediterranean as a whole may be a relatively well delimited ecosystem compared to many other seas, but it is unlikely that the yield of all stocks can be maximised simultaneously, and it certainly does not correspond to one economy or one political domain, let alone one social or institutional system.

The traditional aspiration to generalise in management science and policy makes certain types of socio-cultural model more compatible with applied research than others. That is to say, there is a selective pressure towards generalising reductionism. Hofstede's theories of culture, included in some presentations, could on this background be seen as an attempt to meet at a halfway point between different traditions of theory. As a first step in accommodating the so-called hard and soft sciences, this is promising; but the common ground between the study of facts and the study of meaning is still at the stage of first contact.

IFM (Integrated Fisheries Management) is another name for increased scope. It also raises the issue of legitimacy, which was touched upon in some of the comments to the Bulgarian situation. With new stakeholders in fisheries management or self-management, conflicts are seen to arise when existing institutions are invaded by newcomers (tourist industry, recreational fishing, environmental protection etc.). Context in this case includes the processes referred to as globalisation. Globalisation of communication has turned management of ecological sustainability into a field of interaction, where interested parties with only media-born relations to local situations gain influence. The question is then, what entitlement to influence do the global viewers have, relative to that of local institutions and formal political systems?

The position of most papers was that societies and communities should be taken into account by management policies. The difficulty is to how combine the generality required by legal systems and practical administration with the particularity of context. So-called co-management strategies are one approach to solving this problem, and several papers expressed confidence in the self-regulating dynamics of Mediterranean socio-ecological systems, whether they are called upon to form the starting point for development of appropriate management or to defend themselves in the kind of involutory process that corrupt the intended policy.



The sensitivity to context, to the particularity of the Mediterranean, was strongly emphasised over the two days. If this is indicative of a general trend, it could be taken as a reason to expect that the Mediterranean may get a management system in line with both contemporary research development and traditional local conditions. The Atlantic and North Sea must probably still for some time suffer the consequences of management modelled on mid-twentieth century science and ideology.

### 3.5 Summary of the open forum

The plenary session discussion considered a number of issues emerging from the Workshop. One commentator considered the role of individual property rights in the Mediterranean. Within property systems there may be considerable diversity of individual rights. Individual transferable quotas are only one form of property rights, with the specific characteristics of individual ownership and transferability. Territorial rights, often raised within the Workshop, may also have the dimensions of individual rights by limiting access to the resource, and this can also be said for licensing systems which often involve transferability. It was noted that in the four EU Mediterranean Member States licences were only transferable in a limited way and under strictly controlled conditions. However, the current licensing systems may represent a first step in the evolution of transferable rights. Furthermore, the specificities of the individual property rights approaches may introduce new forms for the Atlantic context.

Attention was also given to the long history and diversity of institutions within the Mediterranean as a basis for new experiences and approaches. This was not a matter of simply reverting back to historic forms, but also of benefiting from global institutional and political innovations and international levels of right formation. International institutions should play a part in providing the opportunity for the old society to progress and coastal fisheries should not be left solely to local or national administrations. Within processes of international institutional framing there is a need to cope with and build on the history of the Mediterranean and to avoid what has been a main difficulty in the Atlantic - a break with history.

Some attention was given to the commonalities and differences between the North Atlantic and Mediterranean models and the need for further analysis of the contrasts and similarities was noted. The specificities of the Mediterranean refer to physiography (a lack of an extensive continental shelf on which to build notions of exclusive economic zones), biology (the great diversity of small populations of fish), political geography (a high seas fishery) and organisational structures and development (a diversity of industry representation within processes of policy making). Given such differences, it is hard to envisage the emergence of a common policy framework in the Mediterranean which emulates the experience in the Atlantic. Nations must undergo considerable development in order to adapt to the principles of a common system of governance for the Mediterranean through regional and sub-regional cooperation.

Some consideration was also given to the attempts to establish social sciences within the work of the GFCM, and initiatives towards socio-economic information systems for the Mediterranean. The plenary discussion was concluded with consideration of future research possibilities within the context of the Fifth Framework programme and future role of ESSFiN.

### 3.6 **Concluding remarks**

The development of a common policy for Mediterranean fisheries is a key challenge for the GFCM, the European Community and the coastal states of the area. The region is a particularly complex one, both politically, economically, culturally and in terms of the specificities of the fishing sector. Much will depend on developing a political consensus that is able to engender the development of common policies and on the ability of the actors involved to cope with the regions specific characteristics and diversity.

Although its predominant focus has been upon Mediterranean fisheries, as only one significant component of southern waters, an overview of the Workshop proceedings revealed considerable diversity of subject matter and disciplinary backgrounds. If anything the Workshop provided a useful baseline review of key issues and management practices in an area which, in terms of management policies, research effort and data availability, remains relatively undeveloped when compared to the experience of northern waters. In this regard the intention of the GFCM to develop a socio-science perspective within its own deliberations, together with an improved socio-economic information system for southern waters, may go some way to further redress this imbalance.

## 4.0 Implications for research

- 4.1 'Contextuality' and 'diversity' would perhaps form the relevant key words to describe the thematic content of the Workshop. A majority of contributions have attempted to place the fisheries of southern waters in their social, cultural, historical, political and economic contexts. Coping with the context, diversity and specificities of southern fisheries represents a significant challenge, but also a central focus for the social sciences. This is also the key test for emerging management approaches in southern waters, which must attempt to balance the development of common management approaches with the need for differentiated management according to diversity of setting.
- 4.2 Many contributions have dwelt on the particularities of Mediterranean fisheries, in particular with regard to its geo-political, historical, institutional and sectoral characteristics. Several key research themes can be identified in these terms.

Research should further elaborate the *geo-politics* of southern waters and the means for the development of international cooperation and common approaches to fisheries management. In other words, fisheries management cannot be considered in isolation, separate from other developments in the political geography of the region. This is particularly relevant given the regions complex and evolving legal-jurisdictional space, the international and transboundary nature of its fisheries, and its emerging institutional framework. For the Black Sea fisheries in particular, attention is required to the transitional status of the fishing industry following the collapse of the command economy.

Research effort should also focus on the extrapolation, rather than recreation, of *historic forms* of appropriation, territorial use and local management institutions. Furthermore, with regard to the emerging approaches to fisheries management in the Mediterranean, further research effort is justified in relation to *organisational development*, at a macro-level involving the reform of the GFCM and development of the CFP in the Mediterranean in line with GFCM policy orientations, and with respect to local institutions and their participation in the policy process.

Finally, research should further target the role, scale and social characteristics of the *small boat sector* which forms the predominant structural feature of southern water fisheries. In particular, this research might refer to the development of more sensitive and targeted policy approaches for the sector, as well as a clearer demarcation of its segmented and diverse sub-sectors, notably amateur, part-time, recreational and professional fishers, which combine to play a significant role in local economic trajectories.

- 4.3 Several papers have considered the fisheries sector in the context of coastal or regional economies and development. At a macro-level this refers to the differential state of economic development between northern and southern states of the Mediterranean which poses a significant challenge to the development of common fisheries management approaches. At a more local

level, further research is required concerning *the interaction between coastal fisheries and new stakeholders in the coastal zone*, notably aquaculture enterprise and tourism. This refers to adaptive strategies of the fishing sector and the management of multiple use conflicts.

- 4.4 Finally, closer attention to the similarities and contrasts of southern waters management issues and practice, as compared to the experience of Atlantic fisheries, is likely to prove productive in developing more effective management approaches in both contexts. Particular benefits might arise through closer comparison of Mediterranean, Black Sea and Baltic fisheries.

## Appendix A: Programme

European Social Science Fisheries Network: FAIR CT95 0070  
Workshop on Southern Waters: Management Issues and Practice  
Syros, 14-16 May, 1998: Municipality (Dimarcheio) of Hermoupolis

Coordinator: David Symes  
Manager: Jeremy Phillipson

Local Workshop Organiser: Babis Kasimis

### Thursday 14th May

0915 - 0930 Registration

0930 - 1030 *Opening addresses*

Chair: David Symes

Ioannis Yiotakis (General Secretary, Region of the Aegean)  
Panayiotis Rigas (Head of the Cyclades Prefecture)  
Ioannis Dekavallas (Mayor of Hermoupolis)  
Vassilios Geranidis (Deputy Minister of Agriculture, Greece)

1030 - 1100 Coffee

1100 - 1230 *Session 1: General Themes*

Chair: Jeremy Phillipson

Serge Collet (Germany) Regionalisation and eco-development of fisheries. Which path of viability for the artisanal fisheries in the Mediterranean Sea?

Ellen Hoefnagel (Netherlands) The influence of culture on fisheries management

Rob van Ginkel (Netherlands) The dynamics of fisheries: a sensitising model

H. Rey, P. Valarié and J. Catanzano (France) La politique des peches en Mediterranee peut-elle oublier qu'elle s'inscrit dans l'histoire?

1230 - 1400 Lunch

1400 - 1530 *Session 2: The Western Mediterranean*

Chair: Peter Friis

Denis Bailly and Ramon Franquesa (France, Spain) Economic information and fisheries management in the Mediterranean

Michel Morin (France) Legal elements of regulatory measures in West-Mediterranean fisheries

Juan Luis Suarez de Vivero, Mayca Frieyro and Juan Carlos Rodriguez (Spain) The Mediterranean regions facing the Common Fisheries Policy: regional politics and fishing policies

1530 - 1600 Tea

*1600 - 1710 Session 3: The Black Sea*

Chair: Juan Luis Suarez de Vivero

Oddmund Otterstad (Norway) Fishing vessels in the Black Sea: adaptation to dramatic changes

Kevin Crean (United Kingdom) Aquatic Resource Management Planning (ARMP): managing multiple user activities at the confluence of the River Danube and Black Sea

## **Friday 15th May**

*0915 - 1030 Session 4: The Central and Eastern Mediterranean*

Chair: Babis Kasimis

J. Daoli, E. Daskalopoulou and A.G. Papadopoulos (Greece) Exploitation of inshore resources and local antagonisms: the case of Aetolo-akarnania, Greece

Katia Frangoudes (France) Le gestion des pêcheries de coquillages dans le golfe de Thermaïkos

Gabriella Mondardini (Italy) Fishing and tourism in the Mediterranean: Sardinian case

1030 - 1100 Coffee

*1100 - 1230 Session 5: Political and Social Regulation of Fisheries in Southern Waters*

Chair: Oddmund Otterstad

Juan-Luis Alegret (Spain) Space, resources and history: the social dimension of fishing in the northwestern Mediterranean

Christophe Breuil (Italy, FAO) The GFCM in the management of Mediterranean fisheries

Juan Antonio Camiñas (Spain) Fisheries management in the Mediterranean Sea: from GFCM recommendations to its application: the Spanish case<sup>1</sup>

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<sup>1</sup> Juan Antonio Camiñas' paper will be tabled at the workshop without oral presentation.

Jose Pascual Fernández (Spain) Fishermen participation in the management of the artisanal fishing in the Canary Islands

1230 - 1400 Lunch

*1400 - 1700 Concluding Session*

Chair: David Symes

- \* Ernesto Penas Lado (DG XIV/B) The Common Fisheries Policy in the Mediterranean (presented by Dominique Levieil)
- \* Rapporteurs: Apostolos Papadopoulos (Greece)  
Jan Kooiman (Netherlands)  
Torben Vestergaard (Denmark)

(Tea Break)

- \* Plenary discussion

Evening Reception

### **Saturday 16th May**

Fisheries excursion to Paros





## Appendix B: ESSFiN Participants

<i>Belgium</i>	Dominique Leveil, DGXIV
<i>Denmark</i>	Peter Friis, Roskilde University Torben Vestergaard, Aarhus University
<i>France</i>	Denis Bailly, CEDEM Katia Frangoudes, OIKOS Michel Morin, Saint-Nazaire Pierre Valarié, Université de Montpellier
<i>Germany</i>	Serge Collet, Universität Hamburg
<i>Greece</i>	Irene Daskalopoulou, University of Patras Babis Kasimis, University of Patras Apostolos Papadopoulos, National Centre for Social Research, Athens
<i>Italy</i>	Christophe Breuil, FAO Fisheries Department Gabriella Mondardini, Università Degli Studi di Sassari
<i>Neths</i>	Ellen Hoefnagel, LEI-DLO Jan Kooiman, Erasmus University Rotterdam Rob van Ginkel, University of Amsterdam
<i>Norway</i>	Oddmund Otterstad, Senter for Samfunnsforskning
<i>Spain</i>	Juan-Luis Alegret, Universitat de Girona Mayca Frieyro, Universidad de Sevilla Jose J. Pascual Fernández, Universidad La Laguna Juan-Luis Suarez de Vivero, Universidad de Sevilla
<i>UK</i>	Kevin Crean, Hull International Fisheries Institute Jeremy Phillipson, University of Hull David Symes, University of Hull

