

1. INTRODUCTION

Recreational fishing has been documented as one of the most popular activities along the coasts of numerous countries around the world, such as Canada, Italy, Spain, and the United States of America (Sutinen and Johnston, 2003). In other countries, recreational fisheries (RF) played an important social and economic role, even if not formally assessed through the use of surveys and other quantification techniques. For example in Egypt, recreational fishing was a traditional pastime, particularly in the coastal large cities of Alexandria, Damietta, Port Said and Al Areah.

Moreover, it has been conceded that recreational fishing was, at the time of this report, a growing activity in the Mediterranean area.¹ The development of tourism in various regions and the enhancement of charter fishing tours have contributed to the extension of recreational fishing to almost all Mediterranean countries. This phenomenon has not come without raising concerns on the potential effects of such activities on fish stocks as well as interactions with commercial fishing activities. According to Sutinen and Johnston (2003), for example, the dramatic rise in the United States marine recreational fishing activity has exacerbated conflicts with commercial fishers and depletion of fish stocks. This remark does not hold for all species in all regions where the two sub-sectors co-exist but is more likely than not for some species, such as the highly migratory species (e.g. bluefin tuna) threatened by overexploitation and greatly prized by recreational and commercial fisheries alike. However, without a proper analysis, it is not possible to identify the potential conflicts between recreational and commercial fisheries in the Mediterranean Sea.

The increasing significance of RF in Mediterranean waters in general and particularly in some areas, such as the Adriatic Sea, will require that countries (at the national, subregional, and basin-wide levels) define sustainable policies and adopt adequate management measures, on the one hand, to guarantee the benefits (e.g. economic, cultural, and social) generated by recreational fisheries and, on the other hand, to protect the marine resources from overfishing and other negative impacts of fishing. However, the importance of RF in the Mediterranean has been largely underappreciated, whether it be from the point of view of its impacts on marine resources or of its socio-economic potential. This under-evaluation may stem, in part, from a lack of investigations into the values and impacts of RF.

As a result, at the time of this study, there was no concerted action for the sustainable development of RF at the Mediterranean Sea-level; neither were there clearly defined national recreational fisheries policies within the Mediterranean countries. However, Spain (both at state and autonomous regions levels) and several other Mediterranean countries had adopted comprehensive, or at least detailed, recreational fisheries regulatory systems. Nine countries (Albania, Croatia, France, Greece, Italy, Serbia-Montenegro, Slovenia, Spain and Turkey) had detailed RF regulations; Lebanon had sparse regulations on RF (i.e. various provisions found in different decrees); while Algeria, Morocco and Tunisia regulated mainly underwater recreational fishing. Unfortunately, little or no RF information was readily available for Israel and Libyan Arab Jamahiriya; therefore, the status of RF in these countries has been largely omitted from this report.

Although necessary, the simple existence of a legal framework is not sufficient for promoting sustainable development of RF, particularly if the regulations are obsolete or irrelevant and enforcement is non-existent or inefficient. Indeed, Mediterranean countries demonstrated a tendency to neglect the management of RF and particularly its monitoring and control for management purposes.

The purpose of this study is to provide a snapshot of RF legal frameworks within the Mediterranean with a view to promoting discussion and experience sharing throughout the basin. Information for 17 Mediterranean countries (including the European Community) was collected and presented as homogeneously as possible to enable cross-country comparisons. The purpose of the report is not to recommend a one-size-fits-all legal framework for the basin but to assist in moving towards

¹ See, for example, Cacaud (2005).

sustainable development of RF through positive examples and by suggesting areas where homogenization of rules and regulations could assist in obtaining these goals. In the absence of country visits, the information within the report came from published and grey literature, internet sites, and personal communications with relevant individuals.

The study is organized into two main parts: 1) a background section presenting international RF initiatives guiding RF management in the Mediterranean and a brief overview of the fisheries themselves (i.e. targeted species, socio-economic impacts, stakeholders, existing policies, and legal frameworks), and 2) a more detailed description of the management measures proscribed for in the legal texts. In addition, detailed tables of RF management measures by country are provided in the Appendixes to this report.

2. BACKGROUND

This chapter provides the context for recreational fisheries (RF) management in the Mediterranean, including international conventions and policy lines guiding RF, recommendations of the relevant regional fishery bodies (RFB), as well as regulations stemming from the European Commission, mandatory to a subset of the basin's countries. The second section of this chapter presents an overview of the RF in the Mediterranean covering the following questions: what types of RF were practiced in the Mediterranean, which were the main RF-targeted species, what was known about the socio-economic impacts of RF in the region, who were the primary stakeholders in RF management, what were the existing national policies guiding RF management, and what RF legal frameworks were in place in the Mediterranean countries.

2.1 International initiatives guiding recreational fisheries management in the Mediterranean

Adopted on 10 December 1982 and entered in force on 16 November 1994, the United Nations Convention on the Law of the Sea (UNCLOS) provided a new framework for management of marine resources; creating new rights and responsibilities for the coastal states. More specifically, Article 61 on exclusive economic zones (EEZ) stated that a coastal state may take the appropriate measures of conservation and management in order to avoid overexploitation of marine living resources. Furthermore, the coastal states, as well as the relevant international organizations (e.g. regional, international), may cooperate to that purpose. Given the extractive nature of RF, States should include RF in their attempts to conserve and sustainably manage their marine resources.

In March 1991, during its nineteenth session, the FAO Committee on Fisheries (COFI) called for the development of new concepts which would lead to responsible and sustainable fisheries. Based on the request formulated by the International Conference on Responsible Fishing held in Cancun (Mexico) in 1992, FAO prepared an international Code of Conduct for Responsible Fishing (FAO, 1995), which was unanimously adopted on 31 October 1995 by the FAO Conference and which provided general principles and international standards of behaviour ensuring sustainable exploitation of marine living resources. The Code has as its main objective to “establish principles and criteria for the elaboration and implementation of national policies for responsible conservation of fisheries resources and fisheries management and development” [CoC Article 2b)]. The Code is voluntary and not legally binding, except regarding the articles based on relevant rules of international law, including those reflected in UNCLOS. The Code intends to provide a framework for national and international efforts to ensure sustainable exploitation of marine living resources, including not only targeted species but also the ecosystems on which they depend.

Although RF were not explicitly mentioned in the Code, the principles and standards of the Code are equally applicable to the conservation, management and development of all RF as with any other extractive fishing activities. As is provided in the Code, “States and all those engaged in fisheries management should, through an appropriate policy, legal and institutional framework adopt measures for the long-term conservation and sustainable use of fisheries resources” (CoC Article 7.1.1). Therefore, according to the Code, States should adopt RF regulations/measures preventing or eliminating excess RF fishing capacity as well as establish effective mechanisms for fisheries monitoring, control and enforcement to ensure compliance with their conservation and management measures.

The Resolution 4/95 adopting the Code requested FAO, *inter alia*, to elaborate as appropriate technical guidelines in support of the implementation of the Code in collaboration with members and interested relevant organizations. Three of the technical guidelines for responsible fisheries address RF explicitly: No. 4 on fisheries management (FAO, 1997a), No. 4 Supplement 2 on the ecosystem approach to fisheries (EAF) (FAO, 2002) and No. 2 on the precautionary approach (FAO, 1997b).

For example, the technical guidelines on the precautionary principle state that the following precautionary steps can also be applied to some recreational fisheries:

- a. “keep some areas closed to fishing in order to obtain the benefits noted above as item (d) under “New or developing fisheries”. Also ensure that excessive fishing effort does not develop in the open areas;
- b. delegate some of the decision-making, especially area closures and entry limitations, to local communities or cooperatives;
- c. ensure that fishing pressure from other (e.g. industrial) segments of the fishery does not deplete the resources to the point where severe corrective action is needed; and
- d. investigate the factors that influence the behaviour of harvesters to develop approaches that can control fishing intensity. For example, improving incomes of individual harvesters may reduce pressure on resources”.

Regarding data requirements and their use in the formulation of fisheries policy, the technical guidelines on fisheries management states that “at the level of policy-making, information on the potential magnitude, possibly measured in terms of potential catch, economic value and employment opportunities for each fishery or each stock should be provided”. The guidelines continue by affirming that “failure to do this could result in policies which lead to unrealistic social or economic expectations and hence encourage overexploitation”. The need for such information in RF is especially important in those RF that overlap with other fisheries sub-sectors.

According to the guidelines on EAF, limiting and adopting appropriate systems of access rights are necessary to responsible fisheries. The guidelines state that “management for a multitude of users-multiples fisheries, tourism, conservation, recreational fisheries and so on- will require appropriate allocation of resources and access to all the different user groups”. Examples of such concepts could include the division of the total allowable catch (TAC), when used, between commercial and recreational fisheries as well as the adopting of a compulsory system of recreational fishing licensing to regulate access to the resources.

In addition, the UN Fish Stocks Agreement (UNFSA) was adopted on 5 August 1995 for the implementation of the provisions of UNCLOS and entered in force on 11 December 2001. The UNFSA aims to ensure the long-term conservation and sustainable use of straddling and highly migratory fish stocks by requiring coastal states and states fishing on the high seas to cooperate for these purposes either directly or through appropriate subregional or Regional Fishery Bodies (RFBs) or arrangements. The obligations include the introduction of a system of obligatory licences, the exercising effective control and the reporting of catches and landings.

One example of such cooperation is seen through the International Commission for the Conservation of Atlantic Tunas (ICCAT)^{2,3} Recommendation 04-12 (2004) to regulate recreational fishing activities to ensure that these activities do not undermine sustainable exploitation of the stocks, notably the bluefin tuna stock, in the Mediterranean Sea. In consequence, ICCAT recommended the adoption of measures concerning recreational fishing activities in the Mediterranean Sea, including gear restrictions, prohibition of sales and catch declaration reports; valid for both sport and amateur fishing activities.⁴ Furthermore, ICCAT adopted its Recommendation 06-05 BFT (2006), including several provisions on prohibition of sales, catch data declarations, catch limits and catch and release fishing.

Likewise, for the first time, in 2006 ICCAT adopted its Resolution TOR 06-17 establishing a Working Group on amateur and sport fisheries,⁵ which would meet in late 2007 or early 2008. According to the Resolution, the Working Group would have to:

² ICCAT has been responsible since 1969 for the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent seas, such as the Mediterranean Sea. All ICCAT recommendations may be found at <http://www.iccat.es/>.

³ Among Mediterranean countries, the following States and Entities were members of ICCAT (last update 5/12/2006): Algeria, Croatia, European Community, France, Libyan Arab Jamahiriya, Morocco, Syria, Tunisia and Turkey.

⁴ For definitions of the various RF, see Section 2.2.1 of this report.

⁵ Title as adopted: Resolution by ICCAT to establish a working group on sport and recreational fisheries.

1. examine the biological and economic impact of amateur [recreational] and sport fishing activities on ICCAT-managed stocks and notably assess the level of harvest;
2. based on available information, identify approaches for managing the amateur [recreational] and sport fishing activities in ICCAT fisheries; and
3. report the results of deliberations to the Commission at its Meeting and, as appropriate, propose recommendations for next steps to manage the recreational and sport fishing activities in the Convention area. CPCs (Contracting Parties, Cooperating non-Contracting Parties, Entities or Fishing Entities) shall report prior to the Working Group meeting the techniques used to manage their sport and recreational fisheries and methods used to collect such data.

In addition, the Scientific Committee on Research and Statistics (SCRS) “should provide the Working Group with relevant information notably concerning the harvest levels in the recreational [amateur] and sport fisheries for most recent year(s) available in advance of the Working Group to assist deliberations”. The outcomes of the working group were not available when this report was developed.

A second RFB in the region, the European Inland Fishery Advisory Commission (EIFAC), had earlier formally recognized the importance of recreational fishing during its May, 1994 Consultation.⁶ During the 1994 Consultation, some key issues were identified, such as the lack of social and economic data on RF fisheries impeding an evaluation of the importance of RF in the region. Another observation included that existing legislation does not always favour sustainable use of resources. These discussions lead to a 1996 symposium on the social, economic, and management aspects of [freshwater] recreational fisheries which was convened in conjunction with the nineteenth session of EIFAC, held in Dublin from 11 to 14 June 1996. The symposium had as a charge to meet various objectives such as developing strategic guidelines for the effective management of recreational fisheries. The symposium consisted of a number of consecutive sessions, including one on the socio-economic and legal aspects of recreational fisheries and another on the criteria for management of recreational fisheries. Moreover, in preparation of the symposium, the EIFAC workshop on recreational fisheries planning and management strategies in Central and Eastern Europe was held in Slovakia, from 22 to 25 August 1995.

The symposium communicated the following recommendations, which were adopted by the nineteenth session of EIFAC:

- improved data collection systems should be established and implemented with pre-defined criteria to provide comparable basic data;
- methods should be developed for the application of socio-economic value estimates;
- EIFAC working party on communication and education should be established to facilitate improved understanding and communication between all the players (e.g. managers, scientists, recreational anglers); and
- EIFAC working party on recreational fisheries should progress the production of a code of Good Practice for Recreational Fishing (Recommendation Rome, 1994).

Additionally, the symposium made the following recommendations to its national agencies:

- responsible bodies in the Members Countries⁷ of EIFAC should adopt integrated, sustainable, long-term approach to aquatic resource management;
- the authorities responsible for the control of recreational fisheries should ensure that true economic and social value of these fisheries is included in decision-making processes; and
- the relevant administrative authorities should monitor, evaluate and adjust management strategies.

In the Mediterranean, the importance of recreational fisheries has been recognized at the institutional level by the General Fisheries Commission for the Mediterranean (GFCM) during its twenty-ninth

⁶ The EIFAC consultation on management strategies for European Inland fisheries and aquaculture for the twenty-first century, held in Rome, in May 1994, during the eighteenth session of EIFAC.

⁷ The Mediterranean countries that were members of EIFAC include Albania, Croatia, Cyprus, European Community, France, Greece, Israel, Italy, Spain and Turkey.

session in 2005 where it adopted the ICCAT Recommendation 04-12 regarding management measures concerning recreational fishing activities in the Mediterranean Sea (GFCM, 2005). Moreover, in 2006 the Confédération internationale de pêche sportive (CIPS) had joined the GFCM under an observer status. Finally, during its thirtieth session (2006), the GFCM recognized recreational fisheries as a new priority area of study and charged the Sub-Committee on Economic and Social Sciences (SCESS) to undertake a series of studies on the legislative and socio-economic aspects of RF in the Mediterranean; according to which this study has been compiled.

At the European level, the European Community (EC) had also recently demonstrated an increased interest in recreational fisheries. For example, the EC had adopted a regulation on management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea [(EC) No. 1967/2006 of 21 December 2006], which included a definition of recreational fisheries (i.e. leisure fisheries) and various provisions on that theme.⁸ The EC Council had adopted gear restrictions as well as prohibition of sales except under particular circumstances. As this regulation is directly applicable within the EC Member States, concerned administrations, including the relevant Mediterranean countries, will need to ensure that these provisions regarding RF are respected by anglers.

As another sign of growing interest in RF management in the Mediterranean, the first Mediterranean Congress of Salt Water Recreational Angling took place in Palma de Mallorca from 20 to 23 September 2006.⁹ The goal of the conference was to analyse the state of RF and its management in the Mediterranean as well as to share experiences from other countries; covering various themes, such as socio-economic impacts, legal frameworks, conservation and education opportunities, and charter fishing development. The Congress concluded that there was currently no common regulatory framework for the conservation and management of RF resources within Mediterranean waters and that there was a lack of information on the volumes of catch as well as on the importance of the fishing RF effort. The Congress claimed evidence that the economic and social importance of marine recreational fisheries was high, albeit not always well documented. The Congress recommended that common and/or consistent regulations should be established for the EC Member States as well as at the Mediterranean basin-level through the GFCM. Regarding technical conservation measures, the Congress also agreed to propose the adoption of different initiatives to the various national authorities, such as promoting catch and release fishing or establishing catch limits and moratorium areas and times for recreational fishing based on scientific criteria and prior stakeholder consultation. The Congress also proposed to lead various evaluations, such as assessments of the capacity (e.g. by number of boats) and of the extent of fishing (e.g. by fishing hours), as well as evaluations of the volume of catches (by species and live weight) by recreational craft. The Congress also highlighted the lack of participation from the recreational sector in fishing fora and decision making processes. Therefore, the Congress proposed to promote the presence of recreational fishing federations in the national and international forums responsible for the management of fishing resources. Finally, the Congress underlined the necessity to improve management controls in RF, “especially prohibiting the sale of catches and establishing minimum sizes”.

2.2 Recreational fisheries in the Mediterranean context

2.2.1 Definitions of recreational fisheries

In general, RF can be defined as a non-commercial (i.e. not for sale, barter, or trade) subset of capture/harvest fisheries; motivated by catching fish for fun, pleasure, or sport.¹⁰ More formally, Cacaud (2005) defined RF as “all types of fishing activities including sport fishing activities undertaken by any individual, with or without a boat, for leisure purposes, and does not involve the selling of fish or other aquatic organisms”. This definition further assumes that RF activities are not motivated by a dependence on fish for food. Within this broad definition, one may further categorize

⁸ See, particularly, Article 17.

⁹ For conference information, presentations, and conclusions, see <http://www.mediterranea-congres.org>

¹⁰ See, for example, Pitcher & Hollingworth (2002).

RF into amateur, tourism, and sport/competition recreational fishing; each having their own associated goals and defined as follows:

Amateur fishing,¹¹ for the purposes of this review, is defined as unorganized hobby fishing. Unorganized in the sense that it is not associated with specific events or competitions. Catches from amateur fishing are either released (catch & release) or are retained for private consumption.

Sport fishing¹² is described as “an organised activity involving free competition between fishermen to catch the largest fish of certain species, the largest number of specimens or the largest total weight depending on the rules of each particular competition” (SFITUM, 2004).

Tourism fishing can be understood as a fishing activity carried out by a third party who organizes a fishing expedition for tourists. Tourism fishing can be conducted by commercial fishermen (*pescaturismo*) or by recreational fishing professionals (“charter”); one main difference being the type of the boat used (commercial fishing boat vs. leisure boat). The aim of charter fishing is mainly to fish; whereas, with the concept of *pescaturismo*, the purpose is not only fishing but also to practice snorkelling, to eat on board fish cooked in a traditional way and just enjoy a day on a boat in middle of the sea. Legislation will differ for each segment of tourism fishing.

There is a tendency to use indifferently or loosely the terms sport fishing and recreational fisheries in the literature as well as in legislation. For example, the Article 19 of the Croatian Law on Marine Fishery of 2003 provide that “Sport-recreational fishing is catching fish and other marine organisms for the purpose of sport and recreation”, which also included free diving. Italy used the term sport fisheries but appears to regulate both amateur and sport fisheries. As target species, methods, as well as fisher demographics vary across the three RF sub-categories, it is necessary that legislations clearly define the terminology as well as the rules and procedures to be followed for each category.

In addition to the goal-based classification of RF provided above, RF may also be categorized by the location and tools used in the activity. In marine RF, one observes four basic groupings: *pêche à pied*,¹³ shore-based, boat-based and underwater fishing;¹⁴ with multiple further sub-divisions (as presented in Figure 1).

Recreational fishing from boats can also be further specified according to the modalities of fishing used under three sub-categories: stationary fishing¹⁵ (anchored or drifting), passive or harvest fishing¹⁶ and active fishing.¹⁷ The third category of which uses the propulsion of the motor to assist in the fishing activity; while the first two categories do not use motor propulsion.

One should note that these goal-based and modality-based categories will overlap; for example, underwater and boat fishing can be practised for sport, amateur or tourism purposes; further complicating their management.

¹¹ Amateur fishing is sometimes referred as recreational fisheries. For the purpose of this study we will understand as recreational fisheries, amateur fisheries, sport fisheries and tourism fisheries.

¹² Sport fishing is also referred to as tournament, competition and contest, and big-game fishing.

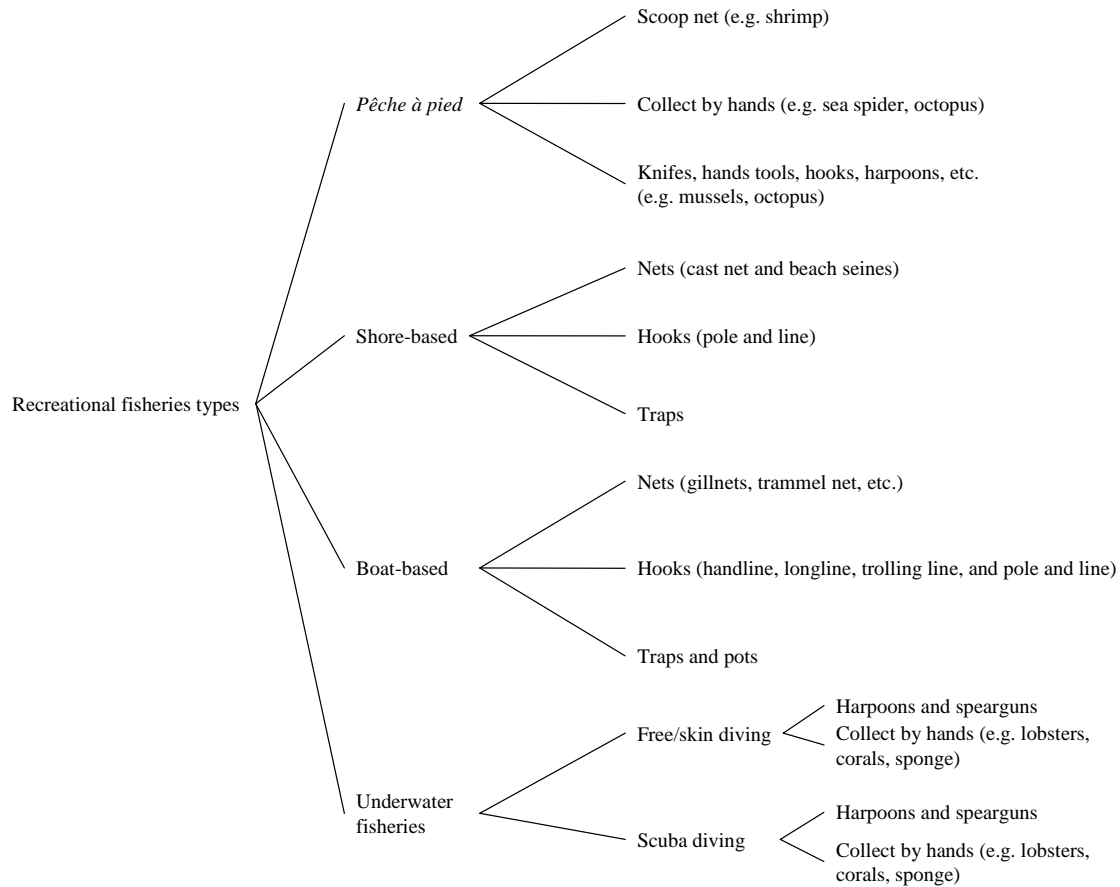
¹³ *Pêche à pied* can be defined as the fishing extractive activity consisting in collecting crustaceans and molluscs in the rocks but also on the beaches.

¹⁴ Underwater fishing can also be referred as spearfishing, skin-diving, harpoons fishing, scuba diving....

¹⁵ Includes: 1) Line fishing with rod (onshore or offshore): bottom line fishing, spinning, shumming, jigging; and 2) Rodless line fishing (onshore or offshore): handline fishing, jigging.

¹⁶ Includes: Longline, potting and nets.

¹⁷ Includes: Trolling (bait and line) from a moving boat (inshore or offshore).

Figure 1. Example of recreational fisheries stratification

2.2.2 Targeted species in Mediterranean recreational fisheries

Recreational fisheries (RF) targeted species varied from one region to another throughout the Mediterranean. In general, anglers on recreational vessels caught common pelagic, mid-water and demersal species. However, there were some species groups of common interest throughout the basin; most notably the “big game” species (e.g. blue shark, tunas [bluefin, skipjack, bonito, little tunny and albacore], amberjacks, dorados, dolphin fish, marlin and swordfish). Other wide-spread targeted species included mackerel, seabass and seabream species, dentex, bogue, European conger and mullet. Such commonality among species (and often the fishing methods used to catch them) could lend itself to the development of coherent and homogenized legal and management frameworks across the basin for these species. This is especially the case as such species are often targeted by the commercial fisheries as well; hence, are the possible subjects of conflicts between the two fisheries sub-sectors.

In the Adriatic Sea, the species fished differed from one coast to other, in part based on soil composition along the various coastlines. For example, in the Italian Adriatic through the gulf of Trieste, shore-based RF targeted mainly sand steenbras and, less commonly, seabream. Italian Adriatic boat-based RF Recreational fisheries primarily targeted fish from the mackerel family and horse mackerel. It is interesting to note that the species targeted by the RF fisheries did not overlap with those species targeted by the commercial fisheries in the area (i.e. sardines, anchovies, benthic species such as common sole, and shellfish) and, therefore, little conflict between the sub-sectors was recorded.¹⁸

The Slovenian and Croatian Adriatic shore-based RF mainly targeted white bream and seabream species. Boat-based RF principally targeted pandoras, picarels and the fish from the Sparidae family,

¹⁸ Personal communication with Marcel Ordan, President of CIPS

such as white seabream and annular seabream, as well as boat-based trolling for European seabass, dentex and fish from *Seriola* family. RF fishing for squid was often performed by trolling with artificial lures or by drift boat with artificial lures or fresh sardines. As was the case in the western Adriatic, commercial fishermen principally fished for sardines, anchovy, mackerels, mullets and flattened fish. This fact and due to the large number of little islands in the region, there was limited conflict recorded between the commercial and recreational fishermen in this part of the Adriatic¹⁹.

Underwater fishing is the most selective activities among the different kinds of RF (Soliva, 2006). In addition, underwater fishing target species have a high gastronomic value. In Catalonia, Spain, the main target species are the white seabream, gilthead seabream, European seabass, conger eel, grouper, mullet, octopus, red scorpionfish, striped mullet, forkbeards, brown meagre, common dentex, combers and greater amberjack. Regarding underwater fishing in Morocco, the main species caught are octopus, groupers and bass.²⁰

Table 1 presents a partial listing of commonly targeted RF species for Egypt, France, Malta, Spain, and Turkey. A complete analysis of target species by country was not the scope of this report; however such a study should be considered a high priority for assisting in developing coherent basin-wide management strategies. A more in-depth review of the main target species caught by RF throughout the basin would assist in broadening our understanding of RF in general and of the possible areas of conflicts between RF and commercial fisheries in the Mediterranean.

¹⁹ Ibid.

²⁰ Personal communication with Malouli Idrissi, INRH Centre Régional Tanger, Morocco

Table 1. Common recreational fisheries-targeted species in Egypt, France, Malta, Spain and Turkey

Countries	Boat-based	Shore-based
Egypt	Groupers, kawakawa, chub mackerel, king fish, blue fish, comber, gurnard, lizard fish, bream, pandora, seabass, gilthead seabream, marble spinfoot.	
France	Offshore boat-based: bluefin tuna, swordfish and dolphinfish. Inshore boat-based: bogue, dentex, mullet, European conger and fish from the seabass family, the seabream family, ²¹ the mackerel family. Less commonly: veever, spotted dogfish, squawfish, gurnard, salema, wreckfish, rays, common sole.	Blenny, ballan wrasse, black scorpion fish, red mullet, wreckfish, common pandora, Spanish bream and wrasse.
Malta	Main species for competition: Albacore, Atlantic bonito, Atlantic little tuna, bluefin tuna and spear fish. Other common species landed: dolphinfish, combers, weevers, stone bass. Other species included: common squid, bogue fish, common seabream, Atlantic horse mackerel, chub mackerel and dentex. Others species caught by amateur fishermen: common pandora, painted comber, white bream, amberjack, saddled bream, rainbow wrass, Mediterranean morey, annular seabream, black and red scorpionfish and Common octopus.	n.a.
Spain	Main species for competition: bluefin tuna, the Atlantic little tuna, the Atlantic bonito and skipjack. Less common: frigate tuna and Albacore tuna. Other main species: gilthead seabream, European seabass, squid, common dolphinfish, bluefish, sand steenbras, greater weever, king fish, pompano, blackspout seabream and bullet tuna.	Gilthead seabream, white seabream, european seabass, sand steenbras, pompano, striped mullet, conger eel, greater weever, grey mullet, octopus, Spanish bream and salema.
Turkey	Bluefin tuna, albacore tuna, dentex, Atlantic bonito, Atlantic mackerel, chub mackerel, little tunny, pandora, fish from the seabream family, seabass and swordfish.	

Notes: n.a. = not available; the occurrence of bluefin tuna over 100 kg fished by French recreational fishermen in the Mediterranean reportedly declined to three in 2005.²²

Sources: Information provided by Ahmed Salem for the General Authority for Fishing Resources Development of Egypt; Marcel Ordan president of Confédération Internationale de la Pêche Sportive (CIPS); Malta (2005); the Federacion Española de Pesca y Casting, Soliva (2006); and Ünal (2006).

Non-targeted species

Bycatch or non-targeted species, terms often associated with commercial fisheries, also occur in RF. Non-targeted species in the Mediterranean comprised species such as sharks and rays, but also species resembling target species, such as Spanish bream and sharpnout seabream, living in the same grounds as pandora and white seabream.²³ Potentially under-reported and discarded, non-target species may constitute unnecessary ecological impacts that should be avoided and monitored within any RF management regime.

²¹ Common seabream, two-banded seabream, white seabream, etc.

²² Personal communication with Marcel Ordan, President of CIPS.

²³ Personal communication with Monica Barone, FAO staff member.

Bait for recreational fishing

As any extractive activity requires monitoring and management, the use of aquatic resources as bait in RF is no exception. Although trolling RF usually employed artificial baits and lures, the use of baitfish and live bait in RF was common in anchored boat and shore-base RF. For example, sardines were used to fish bluefin tuna and swordfish from anchored boats. For golden grey mullets, a special paste of fish and flour mix was used. For salema, seaweeds/alga were used and for other species sardines, anchovy, shrimps, hermit crab, mussels and squid were the common baits employed.²⁴ For this review, no quantitative data were available to estimate the scale of artificial and natural baits in Mediterranean RF. The use of fish and other aquatic resources as bait will need to be monitored throughout the Mediterranean, especially for those species at risk of overexploitation as well as those which are targeted species in other fishing sub-sectors. We must note that in Croatia a new law was adopted in 2006 prohibiting fishing with live bait (Segedin, 2006).

Catch and release in recreational fishing

Catch and release fishing, believed to be a conservation method in that fish are returned to the water alive – often through the aid of altered hooks and special release methods, was not found to be a widespread part of the Mediterranean RF culture. This may have been due in part to the fact that fish caught were often kept for consumptive purposes or are sold. A known exception was the marking/tagging programme of bluefin tuna organized in the south region of France (*Provence Méditerranée*).²⁵ Although the conservation impacts of catch and release practices are still a matter of debate within the scientific and environmental communities, the potential benefits and constraints of catch and release practices should be evaluated in the Mediterranean; particularly for big game fishing where fishing is often practiced for fun and not as a source for food.

Furthermore, ICCAT affirmed in a recommendation (06-05 BFT) that its member countries “shall take necessary measures to ensure, to the greatest extent possible, to release bluefin tuna caught alive, especially juveniles, in the framework of recreational fishing”. This was clearly an invitation to the ICCAT member countries to promote, within the angling community, catch and release of bluefin tuna.

2.2.3 Socio-economic impacts of Mediterranean recreational fisheries

At the time this review was undertaken, very few qualitative or quantitative studies attempting to evaluate the socio-economic impacts of RF existed. However, studies from other regions have shown that RF may be a non-negligible source of income for various services sectors, such as creating employment in the tourism sector (e.g. in hotels, restaurants, charters, and general services in harbours and fishing gear stores), as well as direct revenue in those sectors providing the physical inputs for RF (e.g. naval industry, bait, equipment and gear stores); not to forget the social value of the recreational activity itself (Franquesa *et al.*, 2004). Anecdotal evidence suggested that RF in the Mediterranean was of substantial socio-economic importance and that this importance is likely to increase as the tourism sector expands, ports are developed, and disposable incomes increase in the basin. The value of the sub-sector will need to be understood and placed within the context of the fishing sector as a whole (i.e. along side commercial, subsistence, aquarium, and aquaculture sub-sectors) in order to assist fisheries managers to best allocate limited resources and best develop their fisheries management frameworks. As is the case for all fisheries management, understanding the recreational fishers and the context in which they fish would contribute directly to the development of appropriate and effective management actions. For example, understanding fishers’ motivations will be as crucial in determining allocation of size and bag limits as the corresponding biological/ecological information.²⁶

²⁴ Personal communication with Marcel Ordan, President of CIPS.

²⁵ Ibid.

²⁶ For more reasons on the importance to understand anglers’ attitudes and opinions in management decision making, see Hickley and Tompkins (1998).

However, according to Ditton (1998), research into socio-economic or human dimensions of recreational fisheries [in Europe] has elicited limited interest at the management level, and in the USA and Canada these topics have been mainly limited to academic interest. In contrast, northern European countries began early on (1970) to analyze the economic value of RF for use in management.²⁷ Franquesa *et al.* (2004) explained this difference in priorities between the northern European and Mediterranean countries because, historically, northern European countries are characterized by “the highest sensibility to environment subjects, the upper economic level and the upper research capacity”.

In the Mediterranean, although both the value and the understanding of the value of RF are at a relatively under-developed stage, researchers and managers would be able to benefit from the methods in use in other regions around the world, such as those provided below.²⁸

Current economic valuation techniques can be divided into three sub-categories: 1) revealed-preference approaches (e.g. travel cost, market methods, hedonic methods and production approaches) 2) stated-preference approaches (e.g. contingent valuation, conjoint analysis), and 3) cost-based approaches (e.g. replacement cost, avoidance cost). See Box 1 for a more complete description of the various methods. The travel cost method, used extensively in the United Kingdom, United States of America and in several Nordic countries, “is based on the concept that people spend time and money travelling to a recreational site and that these expenditures, or costs, can be treated as revealing the demand for a site. Surveys of site visitors are undertaken to determine the demand for a site where visit rates are a function of travel expenditure and time, income, any entry fees, environmental characteristics and the availability of substitute sites” (Hickley and Tompkins, 1998). In France, for example, five categories of expenditures incurred by recreational salmon fishers were identified: transport, accommodation, catering, fishing equipment and fishing rights (Porcher and Brulard, 1998). Accounting for all these aspects, the average cost (or investment) per fisher of a salmon fishing season in 1995 was calculated at FF10 669 (US\$2 137). Sport fishermen’s total expenses spent, within the Department, were FF6 500 000 (1995) (US\$302 219).

In the northern European countries, the report “Economic Value of Recreational Fisheries in the Nordic Countries” (Toivonen *et al.*, 2000) presented the results and methodology used to estimate the total economic value (TEV) of recreational fisheries in Denmark, Finland, Iceland, Norway and Sweden. The parameters used in this study were the total expenditures for recreational fishing and the market value of the catch (See Box 1 for results). Such estimates would allow for loose comparisons between commercial and recreational fisheries, such as those provided in Box 3.

In the Mediterranean, few countries had undertaken such evaluations. Known exceptions were evaluations of recreational tuna fishing in France²⁹ and Italy (SFITUM, 2004), a Spanish survey of the entire boat-base marine RF (SFITUM, 2004), and a study in Cyprus (Stephanou, 1980).

²⁷ See, for example, Toivonen *et al.* (2000).

²⁸ For a review of RF surveys methods, see Ocean Study Board (2006).

²⁹ Results were not available.

Box 1. Economic valuation techniques for recreational fisheries

Current economic valuation techniques can be divided into three sub-categories:

1) revealed-preference approaches:

Travel cost: Valuations of site-based amenities are implied by the costs people incur to enjoy them (e.g. improved sport fishing activities, fishing tour).

Market methods: Valuations are directly obtained from what people must be willing to pay for the service or good (e.g. ecolabelling price differentials, increased value of a fishery).

Hedonic methods: The value of a service is implied by what people will be willing to pay for a service through purchases in related markets, such as housing markets (e.g. recreational vessel purchases, housing purchases on coastal areas and waterfronts).

Production approaches: Service values are assigned from the impacts of those services on economic outputs (e.g. increased efficiency from bycatch reduction methods, improved CPUE in a fishery).

2) stated-preference approaches:

Contingent valuation: People are directly asked their willingness to pay or accept compensation for some change in ecological service (e.g. coastal reef preservation, endangered species protection).

Conjoint analysis: People are asked to choose or rank different service scenarios or ecological conditions that differ in the mix of the conditions (e.g. MPA with varying levels of permitted human activities).

3) cost-based approaches:

Replacement cost: The loss of a natural system service is evaluated in terms of what it would cost to replace that service (e.g. alternative coastal livelihoods).

Avoidance cost: A service is valued on the basis of costs avoided, or extent to which it allows the avoidance of costly averting behaviours, including mitigation (e.g. participatory fisheries management reduces conflicts, health benefits of fish products).

Source: Farber et al., 2006.

Notes: Examples have been changed to reflect fisheries aspects.

Box 2. Economic value of recreational fisheries in Nordic Countries in 2000

Total annual fishing expenditures in national currencies, excluding long-lasting equipment such as fishing tackles and boats (2000)

Countries (currency unit)	number of observations	Money spent on recreational fishing (mean/ fisherman)	Money annually spent on recreational fishing (estimated total)
Denmark (DKK)	534	1 170	517 000 000
Finland (FIM)	1 183	930	1 220 000 000
Iceland (ISK)	262	35 900	1 950 000 000
Norway (NOK)	1 108	1 340	1 850 000 000
Sweden (SEK)	1 179	1 470	2 730 000 000

Total economic value of recreational fisheries, two estimates using the contingent valuation method (millions)

Country (currency unit)	Use value (1)*	Non-use value (2)**	Total economic value (3)= (1)+(2)
Denmark (DKK)	248	1 650	1 900
Finland (FIM)	501	493	994
Iceland (ISK)	591	1 190	1 780
Norway (NOK)	1 020	761	1 780
Sweden (SEK)	1 030	1 400	2 430

*Fishermen's extra WTP for their fishing experience

**Non-fishermen's WTP for current state of fish stocks and current quality of recreational fisheries

Note: WTP= willingness to pay.

Source: Both tables are extracted from Toivonen *et al.* (2000).

Box 3. Comparison between commercial and recreational fisheries

Country	Estimation of # of anglers		estimated value (millions)		Quantity of Fish Harvested	
	RF	CF	RF	CF	RF	CF
Finland (a)	1 900 000	2 700	46€(57.4 US \$)	17€(21,2 US \$)	38 000	88 000
Spain (b)	1 333 000 (d)	7 860	641€(796 US\$)	433€(537,6 US\$ millions)	19 744	149 800
United States (c)	13 000 000	n.a.	12 000 US \$	31500 US\$	122 454	n.a.

Sources:

(a) Franquesa *et al.*, 2006.

(b) SFITUM, 2004.

(c) FAO, 2005.

(d) number of recreational fishing licences.

Note: n.a.: not available.

In Italy, the annual expenses of the whole fleet for tuna recreational fishing were estimated at approximately €42 million (SFITUM, 2004).

In Spain, the questionnaire-based survey permitted the estimation of the total annual catch for each vessel and then for the entire Spanish recreational fleet, the costs associated with each kilogram of harvested fish³⁰ and the total annual expenses of the recreational fishing fleet. According to the Spanish study, the total annual expenses of the recreational fleet varied from €34 to €45 million, the higher value includes vessel purchase expenditures.

³⁰ The costs per harvested kilogram was estimated between €1 and €29; not including vessel purchase expenses.

In Cyprus, marine boat-based RF has long been a popular activity and an estimated US\$2 million were invested in gear and boats by about 300 people (Stephanou, 1980). These data refer only to boat-based RF as data for shore-based RF were not available even though shore-based RF was thought to be the most popular mode of fishing, with several thousand participants annually (Stephanou, 1980).

Although preliminary and incomplete, these estimates are first steps in understanding the socio-economic value of RF and, when combined with biological/ecological data, could be used in more holistic and integrated management of aquatic resources. Regarding relevant economic and social information, the minimal information needs are catch declarations (including sport fishing catches [tournament] as well as daily catches [amateur and tourism]), and licence reports (e.g. number of licensed anglers). These minimal data will permit the evaluation of the fishing effort as well as the size of recreational fishing community.

2.2.4 Recreational fisheries stakeholders and their role in management

RF stakeholders (i.e. those having an interest in the development of sustainable RF), could include, *inter alia*, 1) the public authorities at both the local and national levels (e.g. port authorities and ministries in charge of fisheries management, respectively); 2) the RF fishers; 3) the federations and associations of RF fishers and charters (e.g. Fédération française des pêcheurs en mer, Federación Española de Pesca y Casting); 4) environmental associations; and 5) research institutes (e.g. IFREMER in France, MARE e RSTA in Italy). This list is by no means exhaustive and other organisms/stakeholders, such as other users of the aquatic resources and representatives from the secondary industry (e.g. the gear and tourism industries) could be included.

In terms of fisheries management, the benefits of stakeholder participation in policy and management development are becoming generally accepted within the Mediterranean. But it has been acknowledged that in the Mediterranean there was a lack of stakeholder involvement in fisheries management and poor communication and information flow between fishermen, scientists and decision-makers (CIHEAM, 2002).

However, providing for the active participation of as broad a definition of stakeholders as possible will impose certain costs on those involved in fisheries management, such as investing in education and capacity building of stakeholders, increasing information dissemination, creating fora for dialogue, and establishing legal credibility of stakeholder input into management. To assist in encouraging stakeholder participation in fisheries management, examples exist in various regions of formal and informal bodies that have been created and generally comprise representatives from various stakeholder groups with well-defined mandates, such as promoting co-operation in surveillance and law enforcement, advising on social and economic initiatives, prioritizing and implementing data collection for management, addressing specific issues (e.g. codes of conduct, catch and release fishing) and other management functions.

For example, in a 2002 European Commission (EC) Communication to the Council and the European Parliament, the Commission proposed to increase the involvement of stakeholders in the consultation process (Com (2002) 535 final).³¹ In particular, the creation of a Regional Advisory Committee for the Mediterranean was proposed, which would, according to the EC, increase the involvement of stakeholders in fisheries management. However, the inclusion of representatives from the RF sub-sector was not specified.

We must note that the Council regulation (EC) No. 1967/2006 of 21 December 2006, did not include the Commission proposition and did not mention the question of the involvement of stakeholders.

³¹ Com (2002) 535 final, Brussels 09.10.2002, Communication from the Commission to the Council and the European Parliament laying down a Community action plan for the conservation and sustainable exploitation of fisheries resources in Mediterranean Sea under the Common Fisheries Policy.

As a second example, in Canada, the Sport Fishing Advisory Board (SFAB) has been an advisory body to Department of Fisheries and Oceans (DFO) Canada on recreational issues since 1964. Primarily, SFAB is made up of representatives from the BC Wildlife Federation and independent anglers (e.g. Roderickhaig-Brown, Lee Straight) appointed by the Minister in office. Furthermore, the SFAB comprises a main committee and two sub-committees—one for the north and one for the south; regrouping representatives of local fishing interests from the two dozen local communities based advisory committees, but also representatives from provincial angling advocacy groups and recreational fishery panel representatives to the Pacific Salmon Commission. The main committee is made up of representatives nominated by the two sub-committees and representatives from primary organizations (angling) and secondary organizations (business/industry) and appointees to the Pacific Salmon Commission. In addition, SFAB has different working groups focussing on specific species groups such as groundfish.

The role of the SFAB is to discuss and advise DFO on recreational fishing plans, recreational fishery regulations, and any areas of concern to the recreational fishing community during twice-yearly meetings.³²

Such examples, and others, should be evaluated and discussed as potential participatory management mechanisms within the Mediterranean; whether at the fisheries sector level or at the RF sub-sector level, whether at a basin-wide or subregional levels, whether at species/species groups or fisheries levels, or as combinations of these depending on the context at hand.

2.2.5 Recreational fisheries policies

According to the Article 7.1.1 of the FAO Code of Conduct for Responsible Fisheries (the Code), “states and all those engaged in fishery management should, through an appropriate policy, legal and institutional framework, adopt measures for the long-term conservation and sustainable use of fisheries resources” (FAO, 1995). The Code maintains that policies adopted by countries should have as objective to maintain and restore stocks by taking appropriate management measures based on best scientific evidence available as well as on relevant economic and environmental/ecosystem factors. Measures taken should also provide for the conservation of biodiversity of aquatic habitats and ecosystems and protection of endangered species. Such shifts away from production-based policies are equally valid for RF.

Furthermore, the European Commission, in a communication to the European Council and the European Parliament (COM (2002) 535 final), affirmed that “the large number of recreational fishermen, as well as the type and dimension of fishing gears used, justify the wish to include this sector within fisheries management, both for reasons of conservation and fair application of management rules”.

Unfortunately, no RF-specific policy statements were identified during the preparation of this review. As the majority of Mediterranean countries had adopted regulation on recreational fisheries, one must assume that RF policies either were imbedded within overall fishery policies or laws or were not readily available publicly. For example, the preamble of the Spanish Order of 26 February 1999 stated that the increasing importance of recreational fisheries in coastal areas and its potential impacts on the conservation of fisheries resources justified the adoption of RF regulation. As a consequence, it was necessary to regulate RF-authorized species, to designate the prohibitions and maximal catches allowed and to adopt means of special protection for endangered or particular species. However, no specific RF strategy existed for Spain.

In Canada, authorities decided to lead a policy in which citizens were directly engaged in fisheries resource management and, on a broader scale, to promote public awareness about conservation and sustainable use of valuable fishery resources. One of the objectives was to promote public awareness

³² For more details see. http://www.pac.dfo-mpo.gc.ca/recfish/Species/SFAB_e.htm (12/02/07).

about conservation and sustainable use of valuable fishery resources. The framework was developed to provide a clear statement of the Department of Fisheries and Oceans' (DFO) roles and responsibilities in recreational fisheries, and to provide strategic guiding principles to govern how the DFO exercises its roles and responsibilities. According to the policy, the DFO had to undertake cooperative initiatives with other stakeholders. The framework was organized around five principles guiding DFO in its task to develop and implement recreational fisheries policies, programs and initiatives; of which, recreational harvesters have responsibility for shared stewardship for resource conservation and enhancement (see Box 4).

Realizing that fishing pressure on inshore fish stocks – and other associated environmental damage and aquatic habitat degradation – from recreational, subsistence and commercial fisheries was increasing, Australia, in order to prevent the decline in fish stocks and guarantee the future for recreational fishing, adopted a management policy for recreational fishery in 1992 built on a cooperation between government, recreational fishers and the wider community. The draft policy, developed by a representative National Working Group,³³ espoused five primary goals and 16 key principles for the management of recreational fishing across Australia as presented in Box 5.

Box 4. The five recreational fisheries principle guidelines of the Department of Fisheries and Oceans of Canada

1. Recreational fishing is a socially and economically valuable and legitimate use of fishery resources (DFO must ensure fishing opportunities are provided to all fishermen-commercial, Aboriginal and sport, the Department's resource management policies must consider access for recreational purposes).
2. Fisheries and Oceans is responsible for providing sustainable recreational harvesting opportunities as part of integrated management plans consistent with its policies (Conservation is considered as the first priority. Access to recreational fisheries was managed through Integrated Fisheries Management Plans based on species-specific and area-specific policies established by the Department).
3. Recreational harvesters have responsibility for shared stewardship for resource conservation and enhancement (Governments and resource users must share responsibility for conservation and for ensuring that fisheries resources are managed so that they benefit all Canadians. Sport fishing industry and recreational harvesters was encouraged to partner with government and to participate in the decision-making process to manage and protect the resource and its habitat).
4. Mechanisms for federal/provincial cooperation in areas of shared jurisdiction will be established and strengthened.
5. Fisheries and Oceans has a leadership role to coordinate policies/programmes with the federal government which relate to recreational fishing.

Source: DFO, 2001.

³³ Fishers and the recreational fishing and boating industries across the nation have provided comment on ways to refine and improve the principles set out in the draft policy.

Box 5. The Australian National Recreational Fishing Policy

Within the draft policy elaborated by a representative national Working Group in 1992, the following five primary goals and 16 guiding principles form the basis for the national recreational fisheries policy.

1. To ensure quality fishing, and maintain or enhance fish stocks and their habitats, for present and future generations as part of environmental endowment of all Australians.
2. To develop partnerships between governments, the recreational fishing community, and associated industries to conserve, restore and enhance the values of recreational fisheries throughout Australia.
3. To allocate a fair and reasonable share of Australian fish resources to recreational fishers, taking into account the needs of user groups.
4. To establish an information base at national and regional levels to meet the needs of recreational fisheries management.
5. To establish a funding base to effectively manage the nation's recreational fisheries.

The 16 guiding principles:

1. Recreational fishing should be managed as part of total fisheries resource to ensure quality fishing, and maintain fish stocks and their habitats, for present and future generations of Australians.
2. Our aquatic habitats and ecosystems are part of the environmental endowment of all Australians, and are the key to a healthy fisheries resource which requires protection, restoration and enhancement.
3. Government, in its stewardship role, must encourage and assist the community to be involved in all aspects of fisheries management.
4. Recreational fishers and the recreational fishing industry should participate in the protection and management of their fishing heritage to ensure that it is available for future generations.
5. Community consultation at federal, State/territory and local levels should be a key component of recreational fisheries management programs.
6. Recreational fishers are entitled to a fair and reasonable share of Australian fish resources taking into account long term sustainable yields; the rights and entitlements of others; and the need to optimise community returns from available stocks.
7. Recreational fishers throughout Australia should be encouraged to adopt their own Codes of Practice consistent with the goals of this policy.
8. Preference should be given to recreational fishing methods in which the fisher is present and which aim to catch target species.
9. The catching of fish for sale or profit, including barter, by recreational fishers is unacceptable.
10. Programs, consistent with the goals of this policy, which seek to increase recreational fishing opportunities.
11. Reasonable physical access to recreational fishing areas should be provided for throughout Australia.
12. Community awareness, education and enforcement programs should focus on encouraging positive changes in community attitudes to develop a stronger conservation ethic.
13. The economic, educational, health and other social benefits of recreational fishing should be widely recognized and actively promoted.
14. Fisheries management decisions should be based on sound information including fish biology, fishing activity, catches, and the economic and social values of recreational fishing.
15. Adequate funding and support should be provided to manage recreational fishing as part of integrated resource and environmental management strategies.
16. Recreational fishers should continue to contribute to the cost of managing and developing recreational fishing.

Source: Department of Agriculture, Fisheries and Forestry,
http://www.daffa.gov.au/__data/assets/word_doc/6059/nat_recfishing_policy.doc (17/02/07)

As the foundation towards sustainable RF, Mediterranean countries would be well advised to develop RF policies, which would describe the common vision for the nations' RF and provide the road map for RF management. The principles described in such policies, such as engaging in participatory management and maintaining healthy ecosystems, would then be strengthened through appropriate legal mechanisms (laws, by-laws, decrees, etc) and management strategies.

2.2.6 Legal frameworks

As mentioned above, fisheries policy is generally supported by a legal framework formalizing the processes to be followed to obtain the goals and objectives provided for in the policy. Legal frameworks often describe, *inter alia*, the rights and responsibilities of stakeholders, the institutional mechanisms (e.g. identifying the relevant authorities and management bodies at centralized and decentralized levels) related to the management of the fisheries resources, the management processes (e.g. requiring the participatory development of management plans), the decision-making processes (e.g. the use of ecological and socio-economic threshold values as trigger points for decision-making), the access regimes (e.g. requiring the use of total allowable catch limits), and the monitoring and control mechanisms.

In those countries with comprehensive RF legal frameworks (e.g. France, Greece, Italy, Serbia-Montenegro and Spain), several common elements/provisions were found such as daily bag limits, gears restriction or prohibition of sale.³⁴ In the cases where no RF legal framework existed, some countries adopted decrees or executive orders specifically regulating RF; while others included the regulation of RF within a general and comprehensive fisheries law; occasionally followed by subsequent orders or decrees specifying the application or execution of the recreational legislation provisions.

The following table shows the main RF regulations for Mediterranean countries (information was not available for Israel and Libyan Arab Jamahiriya). Few countries had adopted a special regulation only dedicated to RF (France, Greece, Italy, Spain and Turkey), but most countries had included within a general fisheries law succinct provisions of a RF regulation. However, it was often the case that these provisions missed basic management measures such as daily bag limits (Algeria, Egypt, Lebanon, Morocco and Slovenia).

³⁴ This list is not exhaustive.

Table 2. Main recreational fishing regulations in the Mediterranean countries

Countries	Main regulations affecting RF
Albania	<ul style="list-style-type: none"> Regulation No. 1 on the implementation of the legislation on fishery and aquaculture of March 29, 2005. Regulation No. 1 implementing the Law on Fisheries and Aquaculture of 1995 of March 26, 1997. Law No. 7908 on Fishery and Aquaculture of April, 05 1995.
Algeria	<ul style="list-style-type: none"> Law 01-11 of July 03 2001 on fisheries and aquaculture (Article 27). Executive decree No. 03-481 of December 13 2003 fixing the conditions and modalities of fishery exercise. (Chapter II and Chapter VI).
Croatia	<ul style="list-style-type: none"> Marine Fisheries Act of April 22 1997. Regulation on licences and fees on sport and recreational fishery of December 10 1997.
Cyprus	<ul style="list-style-type: none"> National fisheries Legislation (Fishery law-Chapter 135 and subsequent Laws from 1961 and 2005 and Fisheries Regulations of 1990 to 2005). Regulations 17(1), 17(2), 17A, 17B, 17C and 19.
Egypt	<ul style="list-style-type: none"> Act No. 124 of August 18, 1983 on fishing, aquatic life and aquaculture.
European Union	<ul style="list-style-type: none"> Council regulation (EC) No. 1967/2006 of 21 December 2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea, amending Regulation (EEC) No. 2847/93 and repealing Regulation (EC) No. 1626/94.
France	<ul style="list-style-type: none"> Decree No. 90-618 of July 11 1990 on the exercise of marine recreational fisheries. Decree No. 99-1163 December 21 1999 amending Decree No. 90-618.
Greece	<ul style="list-style-type: none"> Presidential Order No. 373 on sport-recreational fishing of 16 July 1985
Israel	n.a
Italy	<ul style="list-style-type: none"> Decree No. 293 of April 13 1999 on the regulation of the activity of "<i>pesca-turismo</i>". Presidential Decree No. 1639 of October 2, 1968 on Sea fishing regulation.
Lebanon	<ul style="list-style-type: none"> Decree No. 2775 on control of coastal fishing, September 28, 1929. Decree No. 1/126 regulating diving sport May 23, 2001.
Libyan A.J.	n.a
Malta	<ul style="list-style-type: none"> Fishing vessels regulations of September 14, 2004 (subsidiary legislation 425.07). Fishery regulations of May 25, 1934; April 23, 1935 (subsidiary legislation 10.12).
Morocco	<ul style="list-style-type: none"> Dahir (law) No. 1-73-235 on marine fisheries regulation of the November, 28 1973. Decree No. 2-61-277 of July 25, 1962. Order No. 212-61 of July 1962. Circular DPMA n) 6132 of June, 25 2003.
Serbia - Montenegro	<ul style="list-style-type: none"> Law on Marine Fishery of September 24 2003 Rulebook on method, type and quantity of fishing tools and gear that can be used in sport-recreational fishing, forms, number and contents for the sport fishing permits February 10, 2004.
Slovenia	<ul style="list-style-type: none"> Marine Fisheries Act of June 12, 2002.
Spain	<ul style="list-style-type: none"> Order 1999/05160 of February 26, 1999 adopted by the Ministry of Agriculture, Fisheries and food on the marine recreational fisheries regulation. Order of July 24, 2000 amending the Order 1999/05160.
Syrian A.R.	<ul style="list-style-type: none"> Legislative Decree No. 30 on the protection of aquatic life of August 12, 1964.
Tunisia	<ul style="list-style-type: none"> Law of September 30, 1994.
Turkey	<ul style="list-style-type: none"> Fishing circulars valid from 1/9/06 to 31/8/08.

n.a. = not available.

On 21 December 2006, a Council Regulation (EC) No. 1967/2006, concerning the management of Mediterranean aquatic resources, was adopted, which included several disposals on recreational fisheries. When this study was compiled, the regulation was newly adopted; so its impact on the legal framework of Member States was not measurable. However, all Member States were required to repeal any existing laws that contradicted the Regulation. Indeed, the Regulation stated that Member States had to ensure that leisure fisheries were conducted in a manner compatible with the objectives and rules of this Regulation (Article 17 par.2). The regulation should instigate major changes with regards to RF legal frameworks in the European countries. Moreover, Member States, according to

this Regulation, must inform the Commission of all measures adopted pursuant to the article 17 dedicated to the regulation of RF.

The following chapter provides a more detailed snapshot of RF legal frameworks throughout the Mediterranean countries.