



**GENERAL FISHERIES COMMISSION FOR
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***EVALUATION OF THE PHENOMENON
OF RECREATIONAL FISHERIES IN ITALY:
BIOLOGICAL AND SOCIO - ECONOMIC ASPECTS***

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This presentation is the result of the Research Programs funded by the European Union titled:

“Sport fisheries in Eastern Mediterranean (Greece & Italy): parameter estimates, linkages and conflict with professional fisheries” (EU Study project n 96/018)



The study analysed the quantity aspects of this fisheries (numbers of recreational fishermen and vessels, catches, fishing effort, etc.), the laws and the administrative framework regulating this activity, and various socio-economic aspects (profile of recreational fishermen, productive capacity, conflicts with professional fishermen, etc.).



The projects took into account only the recreational fishermen who practice the activity in the sea and by vessels.

DEFINITION OF RECREATIONAL FISHERIES

It is possible to define substantially **four types** of recreational fishermen:

| | |
|--------------------|--|
| AGONISTIC, | who belong to clubs and participates in regional and/or national competitions; |
| HOBBYST, | who fish for leisure (during free time); |
| FAMILY, | for whom fishing is a kind of additional income; |
| UNDERWATER, | who use a particular technique and specific gear, who belong to clubs and participates |

LEGISLATIVE FRAMEWORK (*EU Study project n 96/018*)



The profile of the recreational fisherman that can be deduced from national legislation is:

- an individual who fishes using the gears permitted by the law
- an individual who has no lucrative or commercial gain.
- an individual who has the permission to catch a **maximum quantity fixed in 5 kgs** per day or to catch a record size fish (during the sporting events no limits in has been foreseen).
- At present he does not need any license even though **some Local Authorities request an authorisation for 2 fish-pot and 1 longline with a maximum of 100 hooks every boat.**
- He **cannot fish at less than 500 metres to a professional fishery vessel in activity** and he is under the control of all the Agenti di Polizia Giudiziaria.

The profile of the recreational underwater fisherman that can be deduced from national legislation is:

an individual who fishes during the daylight without the usage of artificial breathing mask and who has no lucrative or commercial gain.

He develops his activity from a distance of 500 metres to the bathers and from a distance of 100 metres to the nets of the professional fishery.

The maximum quantity of catches per day is 5 kgs or a record size fish (during the sporting events no limits in has been foreseen).

The gathering of crustaceans and molluscs (only bivalves and gasteropodes) is not allowed.

At present he does not need any license and he is under the control of all the Agenti di Polizia Giudiziaria.

LEGISLATIVE FRAMEWORK reported in ICES WKSMRF REPORT 2009

MANAGEMENT REGULATIONS AND OTHER SCHEMES AFFECTING RECREATIONAL FISHERIES Regulations of season lengths or closed areas

Seasonal limits are present mainly in freshwater fishing. The only seasonal limits at sea are coming from international regulations:

- Bluefin tuna forbidden from 15 October to 15 June (according to ICCAT)
- Swordfish forbidden from 15 October to 30 November (according to ICCAT)
- Lobster forbidden from 1 January to 30 April
- Spiny lobster forbidden from 1 January to 30 April
- Underwater fishing forbidden from sunset to dawn in any season

Area limits are defined for environmental protection or fisherman safety

- Forbidden in core zones of Marine Protected Areas
- **Less than 500 metres from professional fishing units**
- Underwater fishing: distance less than 500 metres from beaches
- distance less than 100 metres from professional fishing units
- distance less than 100 metres from anchored ships

Regulations of bag limits

- Catch limits by law for recreational fisheries are the following:
 - **Max 5 kg/fisherman/day or 1 specimen if heavier**
 - **Max 3 kg mussels /fisherman/day**
 - Max 50 sea urchins/fisherman/day
 - Only **1 grouper** (*Epinephelinae spp.*) / fisherman / day



Regulations of fishing effort (e.g., numbers of traps, gill nets, etc.)

- Lift-net 6 metre/side
- Cast-net 16 metre perimeter
- Rod (max 3 hooks) max 5/angler
- Drift-line max 6 hooks/line
- Long-line max **200** hooks/boat (**before 100 hooks/boat**)
- Trap max 2 traps/boat
- Underwater fishing no scuba, no light



Licenses

Fishing license required for inland waters (freshwaters and brackish waters)

Non professional fishing at sea is regulated by law but don't require a license

Only tuna fishing needs a specific registered permission

Fishing license requirements

- Sport fishing is all non-professional and non-scientific fishing activity.
- Sport fishing is divided into agonistic and recreational fishing
- Fishing is agonistic only during competitions

Protected species regulations

- Marine mammals
- Sea turtles
- Date mussels
- Corals

Voluntary catch-and-release schemes

Catch and release practice is voluntary for recreationals, compulsory in most of sport fishing competitions, fostered by many fishing associations.

Number of fishermen estimation



Due to **the absence of licensing system in Italy**, the evaluate the number of recreational fishermen were used different sources.

The main sources are as follows:

- The results of census of mooring place carried out by the **Society Nauticard**. This organisation upgrade yearly the number and the distribution by ports of the mooring place, including a detailed description of characteristics, facilities and other useful information for the recreational fishermen in each port.
- The information on pleasure boats available at the **Ministry of Transport and Navigation**
- The results of two investigations on the recreational fishery carried out by the **Demoskopea and Studio Freni, two Italian institute of public opinion**.
- Interviews (face to face and by telephone) to the **48 Italian Port Authorities (Capitanerie di porto)**. They are the peripheral offices of the Ministry of Transports and Navigation, but they have jurisdiction also on the fishing activity (both professional and recreational fishery) under the direction of the Ministry of Food Policies.

•Visits and interviews at **FIPSAS** (Italian Recreational Fishing and Underwater Activity Federation), that belong to CONI (Olympic Italian National Committee). The FIPSAS is the most important organisation on this sector. It has a territorial structure corresponding to the Italian province.

• Visits to **equipment suppliers** during recreational **fishing fairs** (AIPO EUDI show in Bologna Fiere, Nautex Show in Rimini and International Nautical Show in Genoa).

From a official data (1996) coming from the Ministry of Transport and Navigation the number of **recreational boats measuring less than 7.5 metres in length is equal to 746,000**.

The recreational fishermen prefers strongly to undertake their activity in the company of friends and it is therefore reasonable to presume that more than one fishermen operates from a boat simultaneously.

In this sense **a minimum of two persons per boat has been assumed**.

Combining the previous assumptions (**746,000 boats and two people per boat**), the estimate of **1,500,000 recreational fishermen** fishing from the boat, confirmed also from the two other above-mentioned sources of information, sound like an acceptable global magnitude of the recreational fishery.

• These sources also allowed us to identify the biological, economic and social parameters to be included in the questionnaires used to collect data, in order to estimate the various aspects related to this complex phenomenon.



GLOBAL MAGNITUDES OF RECREATIONAL FISHERY ACTIVITIES



This section provides information on:

- The size and technical characteristics of the recreational fishing fleet;
- The number of recreational fishermen;
- The distribution of recreational fishermen/fishing vessels by geographical area;
- The fishing gear and techniques used.

For Italy, lack of a licensing system prevented direct estimations of magnitudes, as already mentioned. Instead, indirect approaches and elaboration of relevant questions included in the questionnaires were utilised to reach at approximations of the studied parameters.

Size and characteristics of the fleet

In each of the five sample areas (*Veneto, Liguria, Marche, Latium, Sicily*) the data concerning the structural features of the vessels such as the length and the engine horse power were collected:

| Length class (m) | Veneto (%) | Liguria (%) | Marche (%) | Latium (%) | Sicily (%) | TOTAL (%) | Horse Power | Veneto (%) | Liguria (%) | Marche (%) | Latium (%) | Sicily (%) | TOTAL (%) |
|------------------|------------|-------------|------------|------------|------------|-----------|-------------|------------|-------------|------------|------------|------------|-----------|
| | | | | | | | 4-50 | 36 | 88 | 26 | 0 | 67 | 44 |
| 3-4 | 7 | 0 | 9 | 0 | 17 | 9 | 50-100 | 0 | 12 | 26 | 25 | 21 | 18 |
| 4-6 | 21 | 100 | 35 | 25 | 79 | 52 | 100-200 | 14 | 0 | 13 | 25 | 8 | 12 |
| 6-8 | 50 | 0 | 39 | 50 | 4 | 27 | 200-540 | 50 | 0 | 35 | 50 | 4 | 26 |
| 8-11 | 21 | 0 | 17 | 25 | 0 | 12 | | | | | | | |
| Sample size | n = 14 | n = 8 | n = 23 | N = 8 | n = 24 | n = 77 | Sample size | n = 14 | n = 8 | n = 23 | n = 8 | n = 24 | n = 77 |

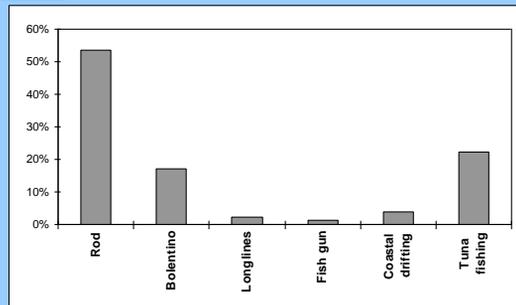
Length distribution (metres) of recreational fishermen vessels

Horse Power of recreational fishermen vessels.
Each vessel is indicated by a number

Gear and fishing techniques used



- Rods,
- Hand line (*Bolentino*),
- Longlines,
- Underwater fishing
- Coastal drifting,
- Tuna fishing (*Big game*)



Usage rate of gear and technique by recreational fishermen

A short description of the gear and techniques used is given.

Rod: the rod is used to support a line attached to reel on the rod. As far as this study is concerned, this gear is taken into account as being used from vessels.

Bolentino fishing: this method also uses simple equipment and consists of laying the bait on the seabed and then waiting for the fish to bite.

Longlines: it is a gear made up by several hooks separately attached to the ends of segments of lines. Each segment of line (called snood) is attached, in a regular way, by the opposite end to a single supporting line. This gear can be supported by floats and can be flagged or marked with other signals. The hooks are baited and the gear is dropped into the sea, adrift or on the seabed for some hours, and then it is drawn up.

Underwater fishing by the means of fish guns: this kind of fishing is performed by diving with oxygen bottles or unassisted. The prey is caught by a rifle-harpoon. The rifle can be an air gun or operated by a band.

Coastal drifting: this kind of fishing is performed with small vessels near the coast. Baited fishing lines are drifted from the vessel.

Tuna fishing: baited fishing lines are drifted in the open sea. The quantity of caught fish can be large (up to 300 or 400 kg) therefore both the fishing gear and the vessels are bigger and much more expensive than the ones used for ordinary drifting.

Seasonal distribution of activities



The first analysis highlighted that recreational fishery is a recreational activity and a hobby, so it is practised during the free time of the recreational fishermen and with good weather conditions. For this reason the activity of the recreational fishermen is concentrated **between April and November**. In winter fishing activity is very reduced. Few recreational fishermen continue to fish in winter, while people which fish tuna continue their sport in cold season even if in very reduced way because the bad weather conditions.

The most popular recreational fishing gears were rod, tuna fishing line and handline (bolentino). Although seasonal fluctuations of usage for these gears were not considerable, **the usage of rod decreased in winter while tuna fishing was more practiced from summer to winter, in relation to migration of big pelagics.**

Seasonal usage rate of gear and technique by recreational fishermen

| Fishing gear | Spring (%) | Summer (%) | Autumn (%) | Winter (%) |
|---------------------------|------------|------------|------------|------------|
| Rod | 59 | 47 | 44 | 33 |
| Hand line (Bolentino) (*) | 22 | 21 | 19 | 24 |
| Longlines | 4 | 3 | 2 | 11 |
| Fish gun | 1 | 1 | 2 | 2 |
| Coastal drifting | 2 | 3 | 5 | 4 |
| Tuna fishing | 12 | 25 | 28 | 26 |

Species



The collection of data on a monthly basis, concerning the period of time between April and November 1998 (only few recreational fishermen practise their activity in winter and in such case for few days), includes information on the caught species.

On the total data the most fished species are: bogue (*Boops boops*) (26%), striped sea bream (*Lithognathus mormyrus*) (15%), scads and horse mackerel (*Trachurus spp.*) (14%), seabream (*Diplodus spp.*) (14%), tuna (*Thunnus spp.*) (13%), mackerel (*Scomber scomber*) (13%).

Percentage of recreational fishermen who have fished the x species in the different regions (1998 data)

| Species | Scientific names | Veneto | Liguria | Marche | Latium | Sicily | Total |
|---|---|-------------|-------------|------------|------------|-------------|-------------|
| Amberjack | <i>Seriola dumerili</i> | 0.0 | 0.0 | 0.0 | 16.7 | 7.0 | 3.8 |
| Atlantic bonito | <i>Sarda sarda</i> | 4.0 | 9.3 | 13.2 | 31.7 | 5.5 | 10.2 |
| Bogue | <i>Boops boops</i> | 26.5 | 40.7 | 5.7 | 0.0 | 46.9 | 25.7 |
| Broad-tail shortfin squid, flying squid | <i>Illex coindetii, Ommastrephes sagittatus</i> | 0.7 | 1.9 | 0.0 | 1.7 | 6.3 | 2.2 |
| Blue shark | <i>Prionace glauca</i> | 6.6 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| Combers | <i>Serranus spp.</i> | 2.0 | 3.7 | 0.9 | 1.7 | 4.7 | 2.6 |
| Corb | <i>Umbrina cirrosa</i> | 4.0 | 0.0 | 0.0 | 0.0 | 1.6 | 1.6 |
| Dentex | <i>Dentex dentex</i> | 0.0 | 1.9 | 0.0 | 18.3 | 3.1 | 3.2 |
| Derbio | <i>Trachinotus ovatus</i> | 0.7 | 1.9 | 0.0 | 8.3 | 1.6 | 1.8 |
| Dolphin fish | <i>Coryphaena hippurus</i> | 0.7 | 1.9 | 0.0 | 6.7 | 3.9 | 2.2 |
| European seabass | <i>Dicentrarchus labrax</i> | 4.6 | 0.0 | 4.7 | 0.0 | 1.6 | 2.8 |
| Flounder | <i>Platichthys flesus</i> | 5.3 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 |
| Garfish | <i>Belone belone</i> | 31.8 | 3.7 | 0.9 | 1.7 | 4.7 | 11.6 |
| Gili-head seabream | <i>Sparus auratus</i> | 9.3 | 9.3 | 1.9 | 0.0 | 0.8 | 4.4 |



| Species | Scientific names | Veneto | Liguria | Marche | Latium | Sicily | Total |
|--------------------------|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Gobies | <i>Gobius spp.</i> | 14.6 | 11.1 | 5.7 | 0.0 | 0.0 | 6.8 |
| Grass goby | <i>Zosterisessor ophiocephalus</i> | 6.6 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| Hake | <i>Merluccius merluccius</i> | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 |
| Horse mackerel | <i>Trachurus spp.</i> | 5.3 | 38.9 | 11.3 | 1.7 | 22.7 | 14.2 |
| Mackerel | <i>Scomber scomber</i> | 15.9 | 0.0 | 26.4 | 5.0 | 7.8 | 13.0 |
| Mulletts | <i>Mugil spp.</i> | 20.5 | 1.9 | 0.0 | 0.0 | 0.0 | 6.4 |
| Pandora | <i>Pagellus erythrinus</i> | 2.0 | 11.1 | 0.0 | 10.0 | 30.5 | 10.8 |
| Pargo bream | <i>Pagrus spp.</i> | 0.0 | 7.4 | 0.0 | 0.0 | 0.8 | 1.0 |
| Picarels | <i>Spicara spp.</i> | 0.0 | 5.6 | 0.0 | 0.0 | 2.3 | 1.2 |
| Red mullets | <i>Mullus spp.</i> | 0.0 | 0.0 | 3.8 | 0.0 | 0.0 | 0.8 |
| Saddled bream | <i>Oblada melanura</i> | 12.6 | 16.7 | 3.8 | 0.0 | 10.9 | 9.2 |
| Scorpionfish | <i>Scorpaena spp.</i> | 0.0 | 0.0 | 1.9 | 3.3 | 3.9 | 1.8 |
| Seabreams | <i>Diplodus spp.</i> | 5.3 | 18.5 | 1.9 | 5.0 | 35.2 | 13.6 |
| Striped sea bream | <i>Lithognatus mormyrus</i> | 12.6 | 0.0 | 45.3 | 0.0 | 7.8 | 15.4 |
| Swordfish | <i>Xiphus gladius</i> | 0.7 | 0.0 | 0.0 | 5.0 | 1.6 | 1.2 |
| Thresher shark | <i>Alopias vulpinus</i> | 3.3 | 0.0 | 3.8 | 0.0 | 0.0 | 1.8 |
| Tub gurnard | <i>Trigla lucerna</i> | 0.7 | 0.0 | 11.3 | 0.0 | 0.0 | 2.6 |
| Tuna | <i>Thunnus spp.</i> | 11.3 | 0.0 | 18.9 | 46.7 | 1.6 | 13.4 |
| Wrasses | <i>Labrus spp.</i> | 6.6 | 0.0 | 0.0 | 0.0 | 0.8 | 2.2 |

Quantities

The yearly mean catch per recreational fisherman, per gear and then the total of gear were estimated by combining those two groups of data. More precisely the datum does not involve the catch by the interviewed recreational fisherman but the whole catch of a vessel. Thus the mean values arising from all the interviews are yearly catches per vessel expressed in kilograms. These values were calculated for each of the five sample areas and out of the data altogether.



Annual catch, annual fishing days, catch per fishing day, per recreational fishermen vessel in the different regions

| Region | Catch 1997 (kg) | Catch 1998 (kg) | Effort 1997 (no. fish. days) | Effort 1998 (no. fish. days) | Catch / effort 1997 (kg / fish. days) | Catch / effort 1998 (kg / fish. days) |
|--------------|--------------------|--------------------|------------------------------------|------------------------------------|--|--|
| Veneto | 521 | 270 | 50.6 | 33.1 | 10.3 | 8.2 |
| Liguria | 232 | 35 | 60.6 | 20.0 | 3.8 | 1.8 |
| Marche | 598 | 197 | 60.2 | 27.7 | 9.9 | 7.1 |
| Latium | 598 | 359 | 89.0 | 43.7 | 6.7 | 8.2 |
| Sicily | 139 | 44 | 45.8 | 17.3 | 3.0 | 2.6 |
| Total | 391 | 167 | 56.3 | 26.6 | 6.9 | 6.3 |

Fishing effort

The fishing effort, together with the catches, is crucial to manage the marine fishery resources. In addition to the biological reasons, the knowledge of the fishing effort is important to prevent wrong decisions concerning the recreational fishery (e.g. the introduction of excessive restrictions in fishing when it isn't necessary or vice-versa).

In the following paragraphs the annual fishing days, the annual fishing hours and the distance from the coast are examined.



Annual fishing days per recreational fishermen vessel in the different regions

| Fishing days | Veneto (%) | Liguria (%) | Marche (%) | Latium (%) | Sicily (%) | TOTAL (%) |
|--------------|------------|-------------|------------|------------|------------|-----------|
| < 11 | 4 | 0 | 8 | 0 | 7 | 5 |
| 11-40 | 40 | 36 | 40 | 0 | 42 | 36 |
| 41-100 | 48 | 55 | 32 | 70 | 48 | 47 |
| > 100 | 8 | 9 | 20 | 30 | 3 | 12 |
| Sample size | n = 25 | n = 11 | n = 25 | n = 10 | n = 31 | n = 102 |

| Region | Distance from the coast (miles) | | | Hours / fishing days |
|---------|---------------------------------|---------|------|----------------------|
| | Minimum | Maximum | Mean | |
| Veneto | 15.9 | 31.6 | 22.9 | 7.8 |
| Liguria | 0.4 | 3.4 | 1.9 | 3.6 |
| Marche | 3.7 | 20.2 | 13.2 | 5.5 |
| Latium | 1.2 | 16.5 | 8.8 | 6.5 |
| Sicily | 1.1 | 4.6 | 3.0 | 4.7 |
| Total | 3.3 | 12.0 | 8.1 | 5.5 |

Comparison between the catches of the recreational fishermen and the professional fishermen

The total estimated value of recreational fishermen catch for Italy is about **24,000 tons** and can be compared with that of the professional fishermen of about **237,000 tons of fish** (ISTAT, 1994 the last available data), of which tunas represent only a small fraction, as shown in the following tables.

At national level, the total production of the RF was equal to 10% of the professional fisheries

Estimates of recreational fishermen catch (t) in the sampled regions and in Italy

| Region | Estimate based on mooring | Average estimate | Minimum value | Maximum value |
|---------|---------------------------|------------------|---------------|---------------|
| Veneto | 3,534 | 3,715 | 3,337 | 4,376 |
| Liguria | 3,198 | 2,643 | 2,116 | 3,198 |
| Marche | 883 | 1,150 | 883 | 1,360 |
| Latium | 3,082 | 2,704 | 2,577 | 3,082 |
| Sicily | 1,120 | 976 | 652 | 1,323 |
| Italy | 23,872 | | | |

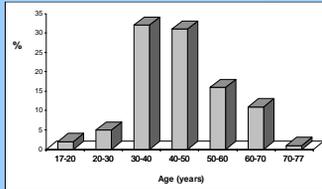
Professional fishermen catch (t) in the sampled regions and in Italy

| Region | Tuna | Total fishes | Total catches |
|---------|-------|----------------|---------------|
| Veneto | 12 | 11,489 | 20,233 |
| Liguria | 127 | 11,006 | 21,220 |
| Marche | 37 | 23,483 | 31,820 |
| Latium | 109 | 10,043 | 13,637 |
| Sicily | 1,182 | 80,320 | 105,223 |
| Italy | 2,043 | 237,169 | 353,490 |



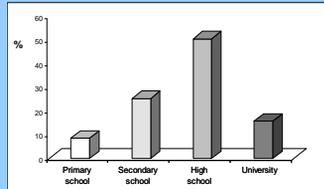
SOCIO-ECONOMIC ASPECTS OF THE RECREATIONAL FISHERMEN (RF)

In order to describe data about age, level of education and profession were collected on the basis of interviews.



The mode is represented by the age between 30 and 40 years (32%). The frequency of the subsequent class is slightly lower (31%). Hence, the age of more than the 60% of fishermen ranges from 30 to 60 years. The frequency decreases since the mode class up to the last one (over 70 years), which is represented by a value equal to 1%. The older three classes (over 50 years) form together the 28% of the distribution. The two younger classes (under 30 years) are represented by percentages forming together the 7% of the distribution.

Age distribution of RF

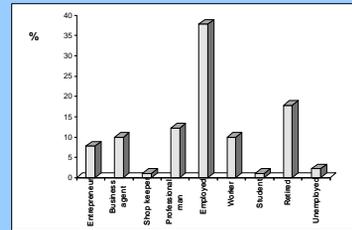


Distribution of the RF by level of education

The employed class shows the highest percentage. Employed and workers are considered as one class,

The mode is represented by the high school class (51%). The university class is represented by the 16%. These two classes form together the 90% of the distribution in the Latium sample. The same percentage is lower in the other sampled areas.

In conclusion, the "typical" recreational fishermen is: male, married, employed, age between 30 – 50 years old, level of education corresponding to high school.



Distribution of the RF by profession

CONFLICTS

Coastal professional fishermen are in direct competition with recreational fishermen, because both groups moor in the same harbours, fish in the same areas, have the same target species and use the same fishing gears.

No conflict seems to exist among recreational fishermen. On the other hand conflicts exist between recreational fishermen and those who fish illegally. The reasons for these conflicts are linked to the resources available but also, and mostly, to the discredit illegal fishermen heap on real recreational fishermen.



Cause of conflicts

The most frequent causes, as it came out from our investigation, are basically the following: competition for the fishing areas, use by recreational fishermen of illegal gear, market competition.

| Existence of conflicts | Recreational fishermen (%) | Associations of recreational fishermen (%) | Professional fishermen (%) | Associations of professional fishermen (%) | Administrative authorities (%) |
|--|----------------------------|--|----------------------------|--|--------------------------------|
| Didn't know, Didn't answer | 0 | 0 | 0 | 0 | 0 |
| Area competition | 100 | 67 | 27 | 12 | 11 |
| Recreational fishermen gear used in improper areas | 0 | 0 | 37 | 35 | 56 |
| Market competition | 0 | 0 | 33 | 53 | 22 |
| Inadequacy of legislation | 0 | 0 | 0 | 0 | 11 |
| Resources competition | | 33 | 3 | 0 | 0 |
| Sample size (no.) | n = 2 | n = 6 | n = 30 | n = 17 | n = 9 |

Resolution of the conflicts



| Resolution of conflicts | Recreational fishermen (%) | Associations of recreational fishermen (%) | Professional fishermen (%) | Associations of professional fishermen (%) | Administrative authorities (%) |
|---|----------------------------|--|----------------------------|--|--------------------------------|
| Didn't know - Didn't answer | 0 | 33 | 0 | 0 | 0 |
| Without any intervention | 0 | 0 | 60 | 23 | 45 |
| Argument | 100 | 50 | 23 | 65 | 33 |
| With violence | 0 | 17 | 10 | 6 | 0 |
| With mediation of local authorities | 0 | 0 | 7 | 6 | 0 |
| With mediation of PF and SF organisations | 0 | 0 | 0 | 0 | 0 |
| With recourse to the law | 0 | 0 | 0 | 0 | 22 |
| Sample size (no.) | n = 2 | n = 6 | n = 30 | n = 17 | n = 9 |

The general opinion of the all interviewed categories is that the conflicts are resolved with arguments or without any intervention. In any case the lack of specific rules (non-registration of the recreational fishermen, non-existence of a license system, lacking in regulation of fishing gear, fishing areas and so on) play the major role in the inefficacy of the public intervention.

Suggestion to remove causes of conflicts



| Suggestions to solve conflicts | Recreational fishermen (%) | Associations of recreational fishermen (%) | Professional fishermen (%) | Associations of professional fishermen (%) | Administrative authorities (%) |
|--|----------------------------|--|----------------------------|--|--------------------------------|
| Didn't know – Didn't answer | 0 | 17 | 23 | 0 | 0 |
| More accurate boundaries for fishing areas | 0 | 50 | 14 | 12 | 11 |
| Improve the legislation (introduction of a licence system) | 0 | 0 | 17 | 17 | 45 |
| Seasonal prohibition of fishing and areas for recreational fishermen | 0 | 0 | 3 | 0 | 22 |
| Restrictions on fishing gear | 0 | 0 | 0 | 12 | 11 |
| Improve the patrol service | 100 | 33 | 43 | 59 | 11 |
| Sample size (no.) | n = 2 | n = 6 | n = 30 | n = 17 | n = 9 |

Table shows the fishermen's answers and their opinions on the need to enact a license for recreational fishing. They are against the enactment of a fishing license because they fear an increase in the costs and in the controls by public authorities on their activities, without similar stricter controls on professional fishing. **On the other hand, they would approve of a fishing license if the money coming from the licensing activity was used so supply services to recreational fishing (such as more mooring places, security measures, etc.).**

Professional fishermen were about a prospective fishing license for recreational fishing. The Administrative authorities, on the other hand, maintain there is a strong need for the enforcement of such a license. They also believe this is the only way for them to implement a real control on recreational fishing.

Thank you for your attention !!!

