




GENERAL FISHERIES COMMISSION FOR  
THE MEDITERRANEAN



SCIENTIFIC ADVISORY COMMITTEE (SAC)  
Sub-Committee on Marine Environment and Ecosystems (SCMEE)  
Sub-Committee on Stock Assessment (SCSA)  
Sub-Committee on Economic and Social Sciences (SCSS)

**Transversal workshop on selectivity improvement,  
by-catch reduction and alternative gears**

**Alexandria, Egypt, 25-27 October 2010**

### Participation

17 participants from Algeria, Egypt, France, Morocco and Turkey. Scientists, fisheries administrations and GFCM representatives. 11 contributions

### Terms of reference

- Determine the **current status** of studies on the effect of the trawl 40 mm square mesh and 50 mm diamond mesh **in reducing by-catches and discards and increasing the selectivity** of the trawl in the Mediterranean
- **Socio-economic impact** of the new mesh sizes on fisheries
- Methods for reducing the by-catch and **the impact of trawl fisheries on the seabed**

## Conclusions

- **Square mesh codends improve notably the trawl selectivity.** Nevertheless, conservation objectives (e.g. minimum legal size) for most of commercial species are not reached
- Studies in the region on **other approaches** (e.g., sorting grids, separator panels) are scarce
- A case study (Turkey) supports the implementation of GFCM recommendation on new mesh regulations in trawl codend from the **economic point of view**
- Due to the potential loss of the incomes at a high social and economic costs in many coastal trawl fisheries, **more pilot case studies** should be performed on the effects of the implementation of the new codend meshes as it was recommended by GFCM
- The creation of **Fishing Restricted Areas** can be considered as an efficient way to improve selectivity also
- **Passive gears** (e.g., traps) can be considered also as alternative technical solutions to reduce impacts of bottom. However, a better knowledge of their selectivity is needed as well as to limit the risks of ghost fishing

## Recommendations on research (I)

- To carry out **more selectivity experiments** (40 mm square and 50 mm diamond) based on the standardized methodology adopted in GFCM-ATSELMED 1. The aim is to get a maximum of information for the maximum GSA's number
- To carry out **experiments on most important technical parameters**, such as twine diameters and twine thickness circumference ratio, among others
- To carry out **experiments on alternative or complementary technical devices** (e.g. grids, separator panels, square mesh windows,) in all GFCM areas in order to improve the overall selectivity of trawls, including effects on vulnerable species as marine mammals, turtles and elasmobranchs
- Based on the preliminary experience and the characteristics of trawl fisheries in most Mediterranean countries, carry out **case studies on the socio-economical impact** of changes of trawl mesh sizes and shapes
- .....

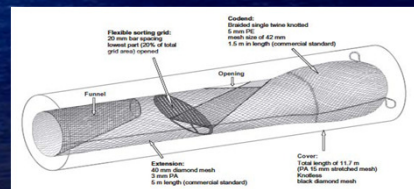
## Recommendations on research (II)

- .....
- Suggest to TECHNOMED network to prepare a **new version of the protocol** as a standard document which could be available for any Mediterranean case study
- It is strongly recommended to **associate more closely fishermen** to all studies and to present them the outcomes
- The **data bases MEDSELECTIVITY** (by GSA's) and **MEDLEGISLATION** (by country) should be updated and available for both the scientists community and fishermen organizations
- It is requested to **TECHNOMED network to draw up an Atlas**, with reference to countries and GSA's, on available trawl selectivity parameters by main target species

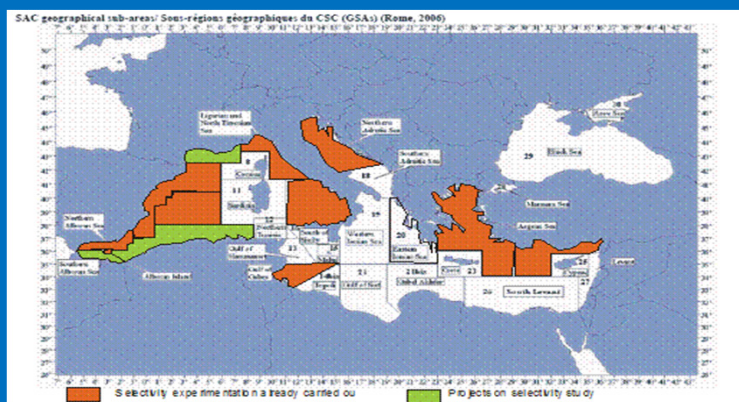
## Recommendations on management

- Considering the Ecosystem Approach, it is recommended to encourage **using pots and traps instead of towed gears (dredges or trawls) for the fishing of some species** as sea snail *Rapana venosa*, Norway lobster *Nephrops norvegicus* and cuttlefish *Sepia officinalis*. Estimation of time, economic and social effects and costs taking for the replacement of the new gears should be evaluated

The workshop unanimously thanked the hosting country (Egypt) and authorities (Arab Academy for Science and Technology and Maritime Transport) for their excellent hospitality and organization



### Current status of studies on selectivity



- 71 bibliographic references. 11 GSA's with studies on square (40 mm) and diamond (50 mm) mesh sizes
- Selectivity improvement with square mesh, but without reaching biological objectives (e.g., minimum legal sizes)