

REPORT of the 1st COPEMED Working Group **"Pilot Study on Operational Units for *Coryphaena hippurus* fishery"**

St Julian, Malta, 20th and 21st July 2004

The meeting started on July 20th evening after the finalisation of the GFCM extraordinary meeting Session in order to count on the attendance of all the participants.

The Project Director, the FAO-FIRM statistics backstopping officer, his assistant, the project fishery biologist and representatives from Malta and Sicily were present.

After welcoming the group COPEMED fishery biologist did a short introduction of the Pilot Study, going back to the antecedents, the justification and the objectives of the working group and of the Pilot Study.

She mentioned the welcome given by the SCSA to the work presented, that even being very preliminary was the first one done in the region for the *Coryphaena*. The interest showed by the SC and the questions posed back there encouraged us to continue with the work in the following year. On arrival to the office and after evaluating the consequences of the work done and the encourage received we thought to deepen the analysis and considering that this fishery is mono-specific, the type of fleet and the area covered is (more or less) well defined, we thought that a possible objective for this new study would be to test alternative management measures based on the Operational Unit concept. We saw this fishery as a target ("ideal") case of testing the tools of the OU concept and management measures such as effort control and temporary limitations.

She also did a short review of the Operational Units concept mentioning historical evolution since 1999 up to now and she gave the last definition of Ancona, Italy, (April 2001), **"For the sake of managing fishing effort within a Management Unit, an Operational Unit is the group of fishing vessels practising the same type of fishing operation, targeting the same species or group of species and having a similar economic structure. The grouping of fishing vessels may be subject to change over time and depends on the management objectives to be reached"** and the recommendation done by the GFCM at its 28th session held in October 2003. The GFCM requested that pilot studies on the subject of Operational Units should be undertaken in order to make progress in implementing an effort control regime at regional level. COPEMED had offered to support first a pilot study on small pelagics fisheries in Alborán sea and now this new example for *Coryphaena* that we consider an "ideal" case study.

The objectives of the Pilot study were set:

1. To draw up an inventory of Operational Units targeting *Coryphaena hippurus* in the GSAs of the western and central Mediterranean (GSAs 5, 12, 13, 14, 15 and 16)
2. To define a correct segmentation of the fleet according to the criteria of the SCESS.

3. Harmonise data collection schemes for catch and effort data, biological and socio-economic data. Where no such schemes exist, they should be set up accordingly. Data in all fields should be collected by fishing port or group of ports and aggregated by Operational Unit.
4. Data available is to be stored in an appropriate database especially designed to manage data on Operational Units.
5. The standardisation of the measure of fishing effort for each Operational Unit should be addressed.
6. The implications of managing fishing effort by Operational Units for co-management are to be identified and assessed.

And the objectives of the Working Group:

- To know data sources of the countries, identifying gaps.
- Design a common frame and catch and effort surveys for this season to try to fill these gaps and incorporating socio-economic data.
- Design the data structure for a flexible use of them.
- Identify needs in terms of personnel, meetings, etc..
- Draw up a possible chronogram to start working in August and foreseeing an end of the study for next spring 2005.

Two points were highlighted by the group as important subjects to address right from the beginning:

1. Correct segmentation of the fleet, always keeping in mind the segments established by the SCESS
2. The need of knowing which are the different activities the vessels can undertake when prices in the market at the end of the season are too low to maintain the fishery or the months before it starts. (*i.e.* swordfish fishery, trammel net ...), since it might imply the “migration” of this Operational Unit to other activity, so forth not being the *C. hippurus* Operational unit any more during the rest of the year.

It was agreed that those items will be taken into account when designing the forms for the surveys.

With the agreement of all the members on considering these items, the first session of the working group was closed.

On the second day, more technical matters were discussed and agreed upon.

First, after a presentation of the MedStat information system, by the IS expert, we analysed and proposed some changes to adapt it to our project.

We worked on a “main table” that would contain all the information in which every record corresponds to a port. All fields in this table should be filled with the information acquired during the field surveys.

Concerning the sampling scheme, it was agreed that a frame survey was going to be undertaken firstly, that a frequency of three days per week would be appropriate for the

catch & effort survey, and twice per month for the biological sampling and observations on board.

The group worked on the forms that had previously been designed within the first phase of the COPEMED-CORY program. The so called forms FS01, FS02, S01 and C01 were discussed and modified, mainly concerning the addition of a series of questions suggested by the Socio-economist expert in order to gather this type of information.

The resulting forms after the end of the Working Group are shown in Annex 2. These are going to be circulated for comments and it was agreed that after the month of August, a second version better adapted to our needs will be produced.

Concerning work programming, it was difficult to elaborate a common calendar, since there were only 50% of the countries represented at that moment. Nevertheless the group was urged to start the surveys and sampling as soon as the fishing season starts in each country. In fact, Sicilian representative made a big effort to give instructions to the samplers at the first site where fishing activity takes place in Sicily during the 3rd week of July.

All participants agreed on the need of organising a new Working Group at the end of the fishing season, hopefully with the attendance of the Socio-economy and the Population Dynamic experts in order to check the quality of the data and suggest improvements if we consider it necessary and to fill the common database in which the IS expert will be working during the sampling months.

During the last session of the Working Group, the Project Director and the FIRM statistics backstopping officer were reported on the agreements reached and drafted on the sampling scheme as well as informed of a very rough foreseen budget. They commented with the rest of the groups some details of the program and with the agreement of all the members the Working Group was closed.

List of Participants

Leonardo Cannizzaro. Scientist at the IRMA-CNR in Mazara del Vallo, Italy
Alicia Mosteiro. Scientist at the MCFS Ministry of Rural Affairs in Malta
Federico De Rossi. FAO-FIRM Information System Officer
Mathew Camilleri. Director of the Laboratory at the MCFS in Malta
Rino Coppola. FAO- FIRM statistics backstopping officer
Pilar Hernández. Fishery Biologist at FAO-COPEMED
Rafael Robles. Project Director.

OPERATIONAL UNIT DATA MANAGEMENT
- CATCH AND EFFORT SURVEY -

Port of landing place: _____ Year:

VESSEL NAME	REG. No.	<input type="text" value="D"/> <input type="text" value="D"/> / <input type="text" value="M"/> <input type="text" value="M"/>	<input type="text" value="D"/> <input type="text" value="D"/> / <input type="text" value="M"/> <input type="text" value="M"/>	<input type="text" value="D"/> <input type="text" value="D"/> / <input type="text" value="M"/> <input type="text" value="M"/>	<input type="text" value="D"/> <input type="text" value="D"/> / <input type="text" value="M"/> <input type="text" value="M"/>
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

NUMBER OF ACTIVE BOATS				
NUMBER OF INACTIVE BOATS				
NUMBER OF LANDINGS				
NUMBER OF INTERVIEWS				

Notes:

OPERATIONAL UNIT DATA MANAGEMENT
– CATCH AND EFFORT SURVEY –
Interview at landing

Port of landing place: _____	Year: <input type="text" value="Y"/> <input type="text" value="Y"/> <input type="text" value="Y"/> <input type="text" value="Y"/>
Form No.: _____	Operator: _____

Beginning Tack: / / /

End Tack: / / /

Vessel name:

Registered number:

No. Hauls:

No. Visited FADs:

Fishing zone: 0-3 miles 3-12 miles > 12 miles

SPECIES	No. Boxes	No. Specimens per box	Weight box (Kg)	Medium size (gr.)	Total (Kg)	Price per Kg
<i>Coryphaena hippurus</i>						
<i>Naucrates ductor</i>						
<i>Seriola dumerili</i>						
<i>Balistes carolinensis</i>						
<i>Polyprion americanum</i>						
<i>Caranx crysos</i>						

Notes:

OPERATIONAL UNIT DATA MANAGEMENT

- CENSUS SURVEY -

Port of landing place: _____

Date: / /

Vessel Data

1	Vessel name	
2	Registered number	
3	GRT (Gross Registered Tonnage)	
4	NRT (Net Registered Tonnage)	
5	Overall length (m.)	
6	Engine power (kW)	
7	Registered gear	

Gear Data

1	Used gear	SEINE	HOOKS AND LINE
2	Length (m)		
3	Width (m.)		
4	Depth (m)		
5	Number of meshes		
6	Opening of the mesh		
7	Floats		
8	Buoyancy		
9	Number of leads		
10	Weight of leads		
11	Netting material		
12	Rtex		

FADs Data

1	Total number of FADs placed in the sea	
2	Position (LAT and LON) of FAD near the port	
3	Position (LAT and LON) of FAD further from port	
4	Course between the first and the last FAD	
5	Distance between FADs	
6*	Position (LAT and LON) between the first FAD and an intermediate	
7*	Course between the first and an intermediate	
8*	Position (LAT and LON) between an intermediate and the last FAD	
9*	Course between an intermediate and the last FAD	
10	Local name of the area in which FADs are place	

* Parameters marked by asterisk must be surveyed only if FADs are not all along one course

Economic Data on Costs

1	Number of fishermen on board (in general)			
2	After the sale of catches, the costs deduced before splitting into parts (yes/no)	a) Fuel	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		b) Ice	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		c) Oil	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		d) Other (specify): _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Percentage (%) of the share for the crew (taking into account the part the owner receives for being a part of the crew)			
4	Cost of full tank of fuel			
5	Number of trips with the tank full of fuel (in average)			
6	The expenses by fishing day other than fuel	a) Ice		
		b) Oil		
		c) Other (specify): _____		
7	Nowadays, the market value of the vessel (with the gear and the electronic equipment)			
8	Fixed costs			
9	Maintaining cost of the vessel in working condition (for time period less than annual, please specify)		VALUE	HOW OFTEN
		Painting		
		Gear replacement		
		Engine renovation		
		Reparation		
10	FADs cost			