

INTEGRATED COASTAL ZONE MANAGEMENT: AN EXAMPLE OF MULTIDISCIPLINARY APPROACH IN CAMPANIA

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INTRODUCTION

The Integrated Coastal Zone Management (ICZM) is a process for the management of the coast using an integrated approach, regarding all aspects of the coastal zone in an attempt to achieve sustainability.

The poster presents some of the outcomes of a project on the ICZM approach applied in Campania region - Southern Italy.

The actions developed focused on:

1. identification of Operational Units (OUs) in Campania fisheries and definition of an OU based management system;
2. analysis of sustainability for small scale fishery and integration among sectors such as tourism;
3. data mapping of no-fishing area and fishing area;
4. promotion and valorisation of local seafood.

The methodology applied to the case study has ensured the participation and cooperation of all the stakeholders involved in fishing sectors and related activities.

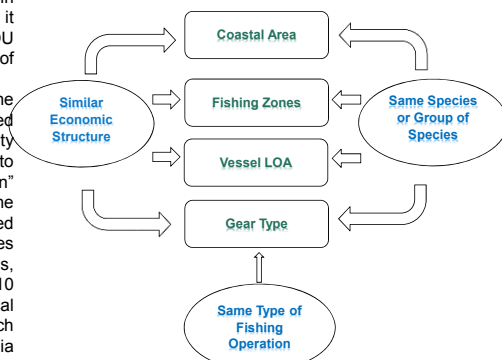


OPERATIONAL UNIT		OU 14	
Main area	Gulf of Salerno		
Main fishing technique	Bottom otter trawl		
Main LDA class	18 - 24 m		
Landings volume	% on total	Landings value	% on total
hake	31.1%	hake	29.0%
red mullet	13.4%	red shrimps	13.1%
deep water rose shrimps	11.3%	deep water rose shrimps	11.6%
red shrimps	4.7%	red mullet	10.4%
liquid	4.5%	liquid	5.0%
mantis squillid	4.2%	monkfish	2.9%
Fishing effort map			
Socio-economic indicators			
RoFA	0.01		
CR/BER	1.13		
Average wage	9081		
MANAGEMENT MEASURES			
Current measures:	National (general): Fishing restrictions in MPA "Punta Campanella" and in the ZPS "Penisola Sorrentina" National (specific): Temporary withdrawal (30 consecutive days) and fishing stop on SaS&Sun Minimum mesh size for trawler nets. Trawling is forbidden on Posidonia beds and on MP GSA 10 fishing grounds deeper than 1000 metres. Local MP: No local measures		
Potential additional measures	Voluntary temporary withdrawal for other 30 days. Trawling is allowed out of 65 metres bathymetry. Fishing ban within 3.8 nautical miles for 30 consecutive days in June.		

ACTION 1

The Mediterranean fisheries are multi-species and multi-gear in nature and it is necessary that the management system takes it into account. The complexity cannot be eliminated, but the OU approach could reduce it by identifying homogeneous groups of vessels from biological, economic and social points of view.

The identification of OUs in Campania fisheries was based on the OU definition endorsed by the GFCM in 2001. OUs are defined by a multidisciplinary approach where the level of homogeneity within each group of vessels is maximized with respect to "species or group of species" targeted, "type of fishing operation" practised and similarity in the "economic structure". Given the geographical and technical regulation levels, the OU based management system defined for the Campania fisheries includes 5 types of measures: non-fisheries-specific Italian measures, fisheries-specific Italian measures, measures in the GSA 10 management plans, measures in the Campania local management plans, potential additional local measures. Each measure is associated to the OUs identified for the Campania fisheries.



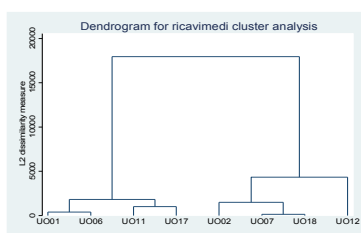
ACTION 2

The CFP defines specific objectives relating to coastal fisheries. In particular, it specifies that management measures should contribute to a fair standard of living for people depending on fishing activities, focusing on coastal fisheries and socio-economic aspects (Article 2). Over the last years, opportunities for re-qualification offered to marine fisheries have included activities such as marine aquaculture and fishing tourism. The latest is growing rapidly and across the overall country, but the economic weight of this activity is still negligible.

The objectives of Action 2, mainly focused on small scale fisheries (SSF), have been the following:

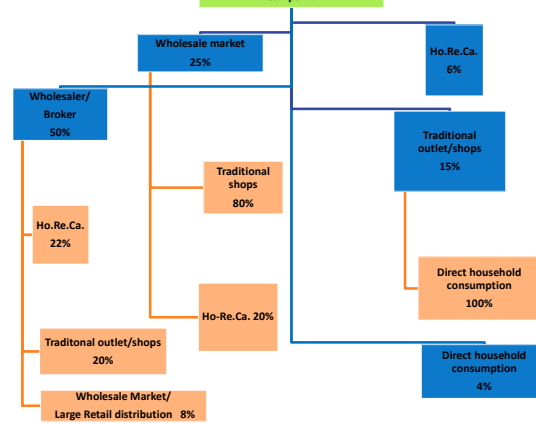
- characterisation of SSF in Campania, analysis of similarities among areas and OUs, defined in Action 1, and evaluation of the economic performance (activity, production and economic indicators and cluster analysis);
- sustainability assessment of SSF in Campania under National Management Plan for GSA 10 (effectiveness evaluation by mean of the SOCIOEC approach, LEI indicators);
- analysis of the relevance of fishing tourism and of recreational fisheries and of conflicts with commercial fisheries (field analysis by mean of interviews to local operators).

Years	ECONOMIC DIMENSION		SOCIAL DIMENSION	
	Gross profit per vessel	VA per employee	No. Employees	Crew wage per employee
2008	1	1	1	1
2009	1	1	1	1
2010	1	1	1	1
2011	1	-1	1	-1
2012	-1	-1	1	-1
2013	-1	-1	1	-1
2014	-1	-1	1	1



ACTION 3

Value Chain of fresh fish products in Campania



The fish market of Campania is among the most interesting at the national level for the consumption volume and value (on the total household consumption). The regional seafood consumption is very high and only partially satisfied by the domestic production.

Main results of the seafood market survey:

- **Retail trade:** the main opportunity is represented by the interest of large retail chains to offer local fish of high nutritional value;
- **New groups of collective purchase:** a percentage of more than 70% showed interest and enthusiasm to buy several times a week local fish, through direct agreements with the fishermen.
- **Canteens:** the seafood served in canteens (universities, etc...) has an origin nor local neither national. Seafood served is always frozen and/or deep-frozen (already filleted).

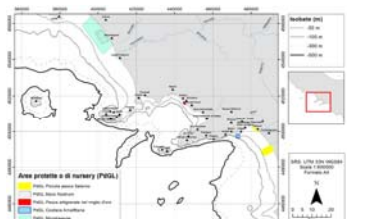
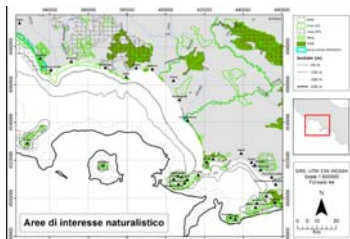
The opportunity for the market is related to the ability of the main market outlets to offer local products that will cost less than the current supply of fish. The main weakness is, indeed, related to the difficulty of local fishermen or group of fishermen to participate in public tenders to supply public bodies (such as universities canteens, hospitals).

ACTION 5

Action 5 produced a detailed description and mapping of four study areas in order to provide the scope and nature of the different and co-existing activities relating to fishery in the same areas.

Main outputs are thematic maps describing:

- zones and/or periods in which fishing activities are prohibited or restricted including for the protection of spawning and nursery areas;
- sites for marine fish farming;
- areas where the most of fishing effort is concentrated with a particular focus on zones which are shared by small scale vessels and trawlers.



References

- Accadia P. and Franquesa R., 2006. *The Operational Units Approach for Fisheries Management in the Mediterranean Sea*, Studies and Reviews. General Fisheries Commission for the Mediterranean, 80
- Malvarosa et al. (2015). *Improvements in Impact Assessment for fisheries management. The SOCIOEC experience*. XXII EAFE conference, Salerno, April 2015

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