

TBTI Symposium on European Small-Scale Fisheries and Global Linkages



The small-scale fisheries and the biodiversity conservation: advance integrated management of fisheries and the marine environment in the Canarian seas

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EU POLITICS FOR INTEGRATED COSTAL ZONE MANAGEMENT

The protection of our coasts and marine waters faces **complex** and multi-facetted **problems**. Our marine and coastal **environment is under severe pressure** from both land-based and ocean-based pollution sources.

EU legislation to protect the marine environment has been progressively implemented in many relevant areas:

- Regulation of fisheries through the **Common Fisheries Policy (CFP)**
- Control of input of nutrients and chemicals into the water through the **Water Framework Directive (WFD)**

But these pieces of legislation, although crucial complementary tools to the protection of marine waters, contribute to the protection of the sea only from specific pressures resulting in a fragmented and **sectoral approach**.

That is why the European Union has adopted **the following instruments**:

- EU Recommendation on Integrated Coastal Zone Management. 2002
- **INTEGRATED MARINE POLICY (2007)**: To achieve the full **economic potential** of the seas in **harmony with the marine environment**. It is the first time a policy has brought together all the sectors that affect the oceans.
- **Marine Strategy Framework Directive**, 2008, which offers a comprehensive and integrated approach to the protection of all European coasts and marine waters.

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SPANISH INSTITUTE OF OCEANOGRAPHY – CANARY ISLANDS LAB

100 years of history, assessing Spanish fisheries from all over the world.

For the last couple of decades, has tackled a necessary **shift to multidisciplinary science**

At Canary Islands lab, fisheries mainly from Africa have been assessed, together with tuna fisheries from several Oceans

During century XXI, projects have included this **new integrative perspective**.

There is a constant need of conciliating artisanal fisheries and biodiversity conservation.



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FISHERIES MONITORING AT SPANISH MARINE RESERVES OF FISHERIES' INTEREST

- Marine Reserves of La Graciosa (1995), La Restinga (1996) & La Palma (2001)
- Aim: Fisheries monitoring and Reserve Impact on them
- Methods: Fisheries Assessment Surveys, Report and Sampling Web, onboard scientific observation, Studies of recreational fisheries' impact, Underwater photography after El Hierro volcano.
- Frame: Colaboration Agreements with Secretaría General de Pesca.



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MARINE RESERVES OF FISHERIES' INTEREST

PROTECTION

**SMALL-
SCALE
FISHERIES**

**FISHERY
RESOURCES**

HABITATS

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NATURA 2000 SPECIAL AREAS OF CONSERVATION

PROTECTION

**SMALL-
SCALE
FISHERIES**

**FISHERY
RESOURCES**

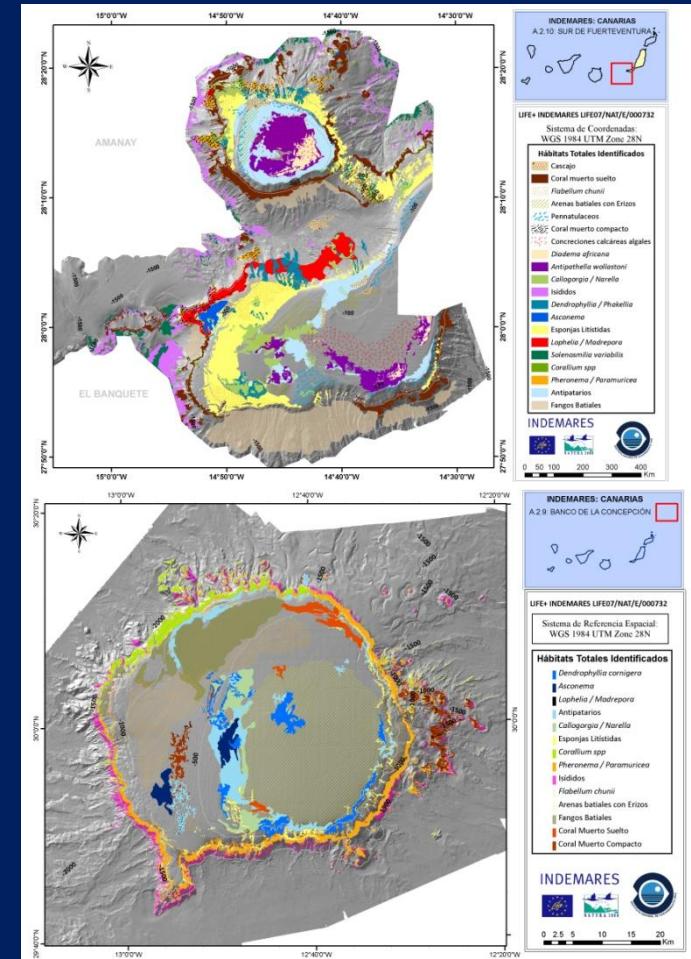
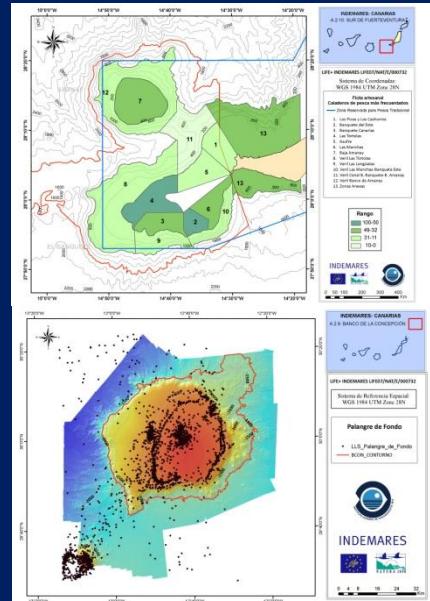
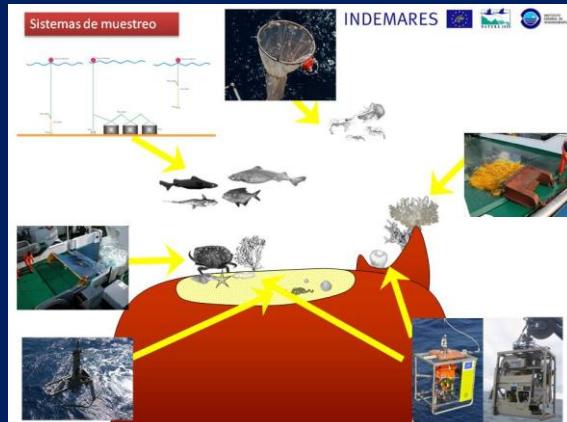
HABITATS

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PROJECTS FACING BIODIVERSITY AND SENSITIVE HABITATS AND SPECIES PROTECTION

• INDEMARES: Inventory & Designation of the Marine Natura 2000 Network off Spain

- 2 study areas: Banco de La Concepción & South of Fuerteventura
- Habitats and species mapping:
 - Many Research Surveys
 - Multidisciplinary teams
 - Direct and Visual Samplers
- Fishery footprint
 - VMS & logbooks
 - Interviews
 - Landing points' sampling
 - Onboard observation

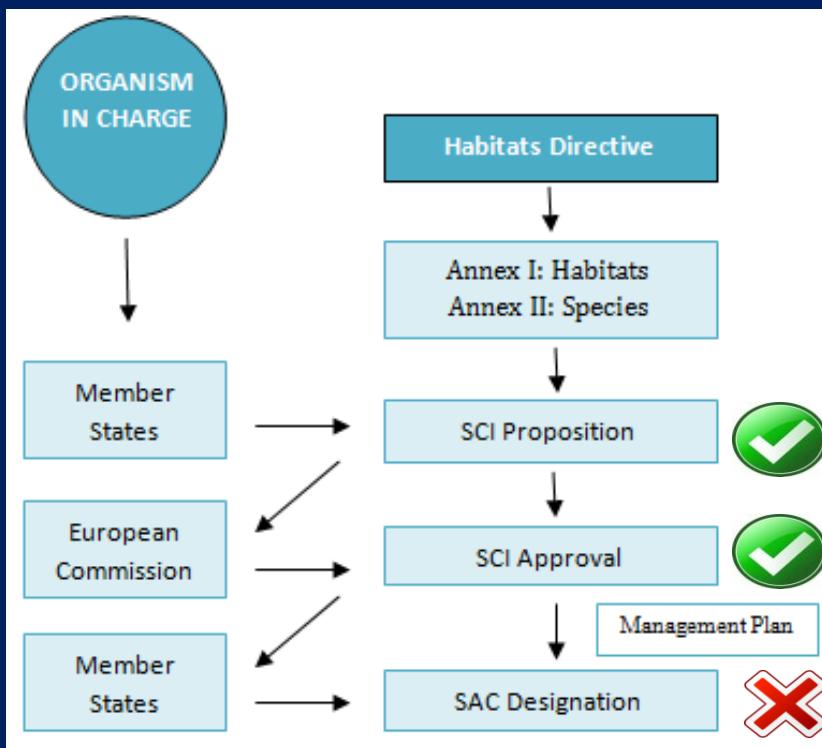


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PROJECTS FACING BIODIVERSITY AND SENSITIVE HABITATS AND SPECIES PROTECTION

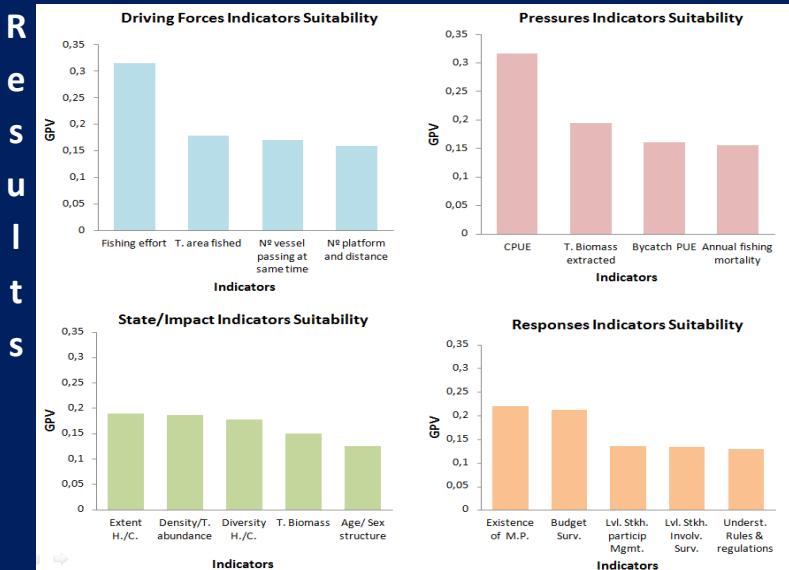
- INDEMARES: Administration advising, an example

Master Thesis of International Master of Science in Marine Biodiversity and Conservation, student Jose María Fernández-Palacios, entitled: "GUIDELINES AND RECOMMENDATIONS FOR THE DEVELOPMENT OF THE MANAGEMENT AND MONITORING PLANS OF THE POTENTIAL SPECIAL AREA OF CONSERVATION OF BANCO DE LA CONCEPCIÓN"



Methods

DPSIR conceptual model (creating indicators' list)
 Delphi Method (experts panel) and Multicriteria Decision Analysis (Addressing indicators' suitability)

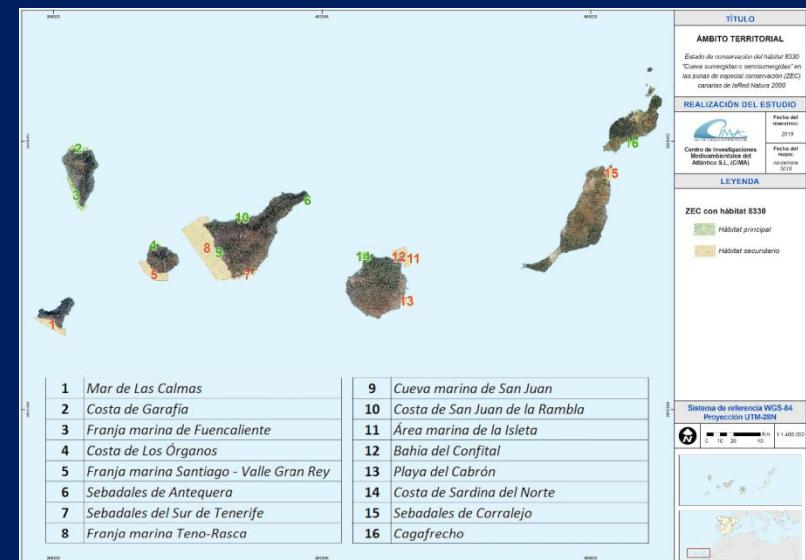


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PROJECTS FACING BIODIVERSITY AND SENSITIVE HABITATS AND SPECIES PROTECTION

• MARINE ESTRATEGY Agreement with Ministry of Environment

- Natura 2000 Network: Inventory and mapping of sensitive habitats (8330 –caves-, 1170 –reefs-, 1110 – sandbanks with ‘sebadales’)
- ME indicators monitoring programs (biodiversity, fisheries, contamination, water column, invasive species, ...)
- Fishery footprint and interaction with sensitive habitats and species: Special Monitoring Plan for the Canary Islands small-scale fisheries (lack of VMS)



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THANKS FOR YOUR ATTENTION

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