MANAGEMENT AND CO-MANAGEMENT OPTIONS FOR SMALL-SCALE FISHERIES IN THE MEDITERRANEAN AND BLACK SEA

Background paper - Thematic session II

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Outline

- Introduction
- Management and co-management: actual co-management versus participatory advisory schemes
- Overview of traditional fisheries management in the region
- Relevant options for co-management: area-based management; spatial/temporal closures; MCS; community-based data collection; case studies
- A legal framework for fisheries co-management: how does co-management fit in national and regional legal frameworks?
Impacts of small-scale fisheries

From Defeo and Caddy 2001

Small-scale fisheries management

- Spatial heterogeneity of resources and fishery dynamics
  Need for fine-scale management

- Disperse and remote landing sites
  Difficulties in monitoring and enforcement

- Often low volumes, low revenues
  Limited funds for data collection, research, enforcement
How to tackle this problems?

Challenge to centralized top-down models

• Co-management

• Community-based data collection programs

• Multi-scale, inter- and trans-disciplinary approaches
Institutional arrangement where responsibility for resource management is shared between the government and user groups
How successful are co-managed fisheries?

> 1,000 documents

N = 130 fisheries, 44 countries

~ 40% fisheries with a success score ≥ 6

~16% total failure (success score ≤ 1)

What are the key attributes for success?

Key for success

- Identify leaders
- Build social capital
- Incentives (community quotas, TURFs)
- Presence CB spatial/temporal closures
- Long-term management and policy
- Monitor the resource and collect data

Traditional management and decentralization

- Document traditional management and self-governance since 1900s:
  - Forest government–community partnerships in India and Kenya
  - Lofoten Islands cod fishery in Norway, Japanese inshore fisheries
  - Cofradias and Prud’Hommies in the Mediterranean

- Co-management depicted as simple partnership arrangements

- However, current experiences indicate that co-management has become more complex, dynamic, adaptive
Prud’hommes

• French professional organizations since medieval times (recognised in 1859)
• 33 Prud’hommes > 1,522 fishing vessels along the Mediterranean coast of France
• Small-scale, multispecies fisheries
• From realization that “one-size-fits-all” approach was inappropriate
  • Stricter regulations and better compliance
  • Efficient system of penalties for infractions
  • Promote effective time/area closures
  • Success: presence of leaders, rights to exclude outsiders

Cofradias

• Spanish fishermen Guilds (Cofradias) founded in the 12th Century
• 229 Cofradias cover all the Spanish coastal line and islands
• Some characteristics:
  – Democratic structure (owners and the crew)
  – Good levels of catch reporting and data collection
  – Catch sold in local market with fees to cover administrative costs
  – Can establish their own rules
  – Evolved systems of control, surveillance and enforcement.
Relevant components of co-management

- Access rights
- spatial/temporal closures;
- monitoring, control and surveillance (MCS)
- Traditional Ecological Knowledge (TEK) and data collection programs

Spatial access rights

- Include restricted fishing inside MPA, TURFs
- Particularly important when lack of stock assessment and input control (e.g. TACs) and for low mobility resources
- Not a prerequisite but enhances fisher’s sense of ownership, resource stewardship and cooperative management
Spatial / temporal closures

• Commonly used tool by managers for all type of fisheries and management schemes

• However, closed areas or season and spatial rotational management schemes often more effective under co-management

• Time/area closures (e.g., MPA) are successful when strong community involvement, group cohesion and cooperative harvesting strategies.

Monitoring, control and surveillance

• MCS is critical but often lacking in SSF

• Co-management allows fishers to assume greater responsibility in MCS and reduces the responsibility borne by management authorities.

• Self-enforcement of rules and regulations are typical of successful co-management of small-scale fisheries
TEK and data collection

- Information (TEK, field data) to **assess the state of the resource** and to **monitor effectiveness** of regulations

- Community-based data collection programs (CBCP) are cost-effective mechanisms to move **towards data-rich situations**

Relevant components of co-management

- 3 Latin American small-scale fisheries under co-management

- 2 success (Chile, Mexico); 1 failure (Galápagos, Ecuador)
Co-management in Chile

- “Loco” *Concholepas concholepas*

Catches at similar levels to development phase of the fishery, whereas the 
price per ton significantly increased during the co-management period

KEY FOR SUCCESS

- TURFs only for well-organized fisher associations
- Management redundancy: closures, legal sizes, TAC for each community
- Marine reserves: conservation + management
- Well-organized fisher groups with strong leadership and compliance rules
- Government, users (and scientists) co-operate in decision making
Co-management in Mexico

- Lobster fishery with exclusive rights to Cooperatives
- 106 “campos” allocated to families with exclusive fishing rights

Vigía Chico: most successful cooperative along the Yucatan Peninsula:

- CPUE is consistently higher
- Average price paid to fishers above the national average: largest lobsters, better quality, community cohesion driving prices, trust bymiddlemen
- Certified as sustainable by the Marine Stewardship Council

Co-management in Mexico

KEY FOR SUCCESS

- Well-defined territorial permits
- High geographic isolation: self-help approach to community development
- Grounds inheritable and transferable within the community
- High enforcement and monitoring levels (data!)
- Strict community rules: penalties and self-policing strategies
- Legal individual sizes and weights: quality over quantity

“Work, respect and trust: strength of the alliance”
Co-management in Ecuador

- Law explicitly supporting co-management: Participative Management Body or “Junta”
- Within Galapagos Marine Reserve of 133,000 km² (20% NT)

After co-management:

CPUE and density decreased; unit prices high due to limited availability

2007: fisheries close to collapse, despite the full co-management arrangement

KEY FOR (UN) SUCCESS

- Co-management in law; institutionalized cooperatives; national park
- Annual assessments required by law

However:

- Lack of management framework
- No long-term management policy
- No TURFs allocation or individual quotas
- Weak group cohesion and no (unreliable) leadership
- Weak enforcement (no formal or informal MCS)
Community-based data collection program

- Cost and time effective
- Needs capacity building and calibration/validation
- Adapted to different social-economic and cultural context
- Pre-cursor for community-based, co-management

San Diego, CA – USA
- Fishery-dependent and -independent
- Almost 100% participation
- Fine spatial and temporal resolution
- First stock assessment of the San Diego sea urchin fishery

Praslin – Republic of Seychelles
- Fishery-dependent
- Capacity building
- Community empowerment
- Resource stewardship

Gutiérrez, Bijoux, Robinson 2011 (GEF-FAO)
Are legal frameworks necessary?

- An existing **enabling** legal environment is essential

- However, the existence of **formalized legal frameworks** are not a pre-requisite for the implementation of co-management **per se**.

- **Political will** is the key to the establishment of co-management mechanisms. It must be reflected in attitudes and behaviour, as well as support within policy, legislation and actions specific to the fisheries sector.

Capacity building

**Aimed at support main co-management actors to:**

- Understand what co-management entails and how to **organise to participate proactively**;

- Master **knowledge and information** about the resources, including knowledge of environmental problems, needs, and opportunities

- Foster **participatory and communication skills**, methods for participatory learning

- Become a **recognised and legitimate actor**, which in most cases will imply taking on a legal identity (e.g., cooperatives);

- Deal effectively with administrative tasks (meetings, records, accountings, financial reports, proposals, etc.)
Thank you