

Science, participatory approaches and decision support processes in fisheries: sharing experiences and practices from an inter-disciplinary perspective



Claire Macher^a, Denis Bailly^b, Marta Ballesteros^c,
Michel Bertignac^a, Francesco Colloca^d, Mike
Fitzpatrick^e, Katia Frangoudes^b, Dorleta Garcia^f,
Marloes Kraan^g, Rich Little^h, Loretta Malvarosa^j,
Simon Mardleⁱ, Arantza Murillas^f, Lionel Pawlowski^a,
Manuelle Philippe^b, Raul Prellezo^f, Evelina Sabatella^j,
Nathalie Steins^g, Olivier Thébaud^a, Clara Ulrich^k

- a. Ifremer, France,
- b. Univ Brest, France.
- c. CETMAR, Spain,
- d. IAMC-CNR, Italy,
- e. Irish Observer Network Ltd, Ireland,
- f. Azti-Tecnalia, Spain,
- g. Wageningen University & Research, The Netherlands,
- h. CSIRO Marine and Atmospheric Research, Australia,
- i. Fishor Consulting, UK,
- j. NISEA, Italy,
- k. DTU Aqua, Denmark

Context

Shifting policy focus towards Ecosystem Based Fisheries Management

- Changing levels of integration of knowledge and disciplines
- Changes in approaches to stakeholder engagement
- New opportunities and roles of scientists

Scientists:

- contribute to support decision through research projects, institutional decision support or other kinds of partnerships
- have held different roles and experienced several kinds of interactions with stakeholders through participatory approaches or directly to managers and decision makers.

Problem statement

However:

No clear **state** of the existing interactions, objectives and roles of the scientists in the process

Limited **hindsight/analysis** of the added value of these partnerships/roles to :

- the trends towards EBFM
- the improvement of the decision support process

Not trivial :

- to draw lessons on the **level and kind of interactions** improving decision-support / effective implementation of EBFM
- to **formulate and operationalize** the role of scientists in the process

→ Requires experience sharing across scales and case studies and an inter-disciplinary approach



www.shutterstock.com · 705067966

Objectives: share and compare

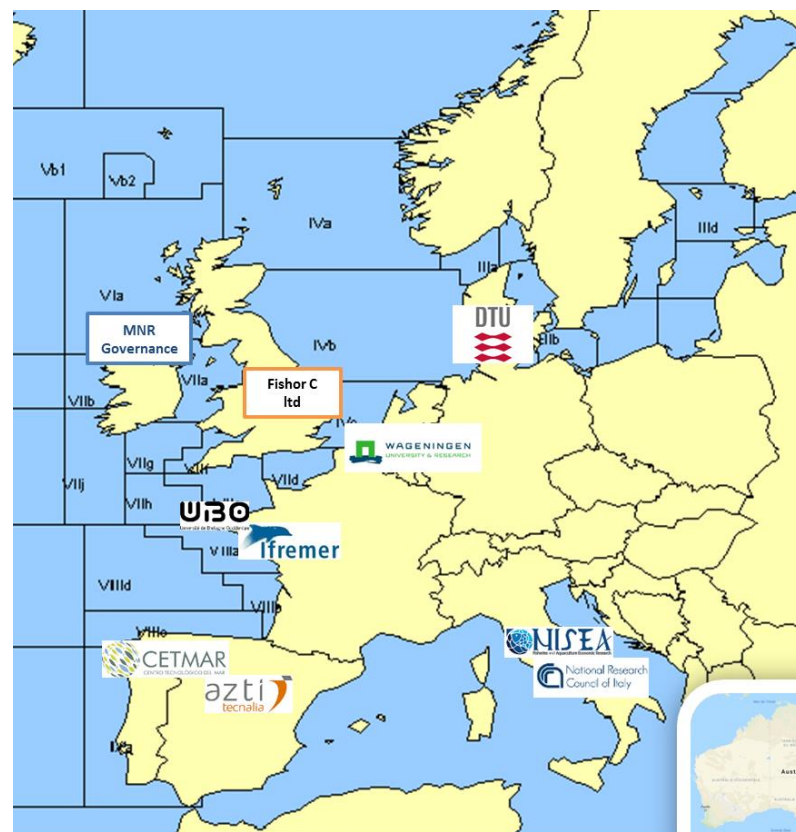
Workshop held in January 2018

Brought together

- Biologists
- Economists
- Social scientists
- from Europe and Australia
- involved in decision support processes and participatory approaches in fisheries

Objectives:

To share experience and initiate an inter-disciplinary network on transdisciplinary approaches in fisheries



Methods

Common template for cross-study comparison

- Context
- Framework
- Links to decision making process
- Role in the process

- Partners
- Nature of the interactions
- Kinds of collaboration

- Lessons learnt
- Use of the results for decision
- Benefits of the partnership
- Difficulties

19 case studies

North Sea

Celtic Sea

Bay of Biscay

Iberian Waters

Mediterranean Sea

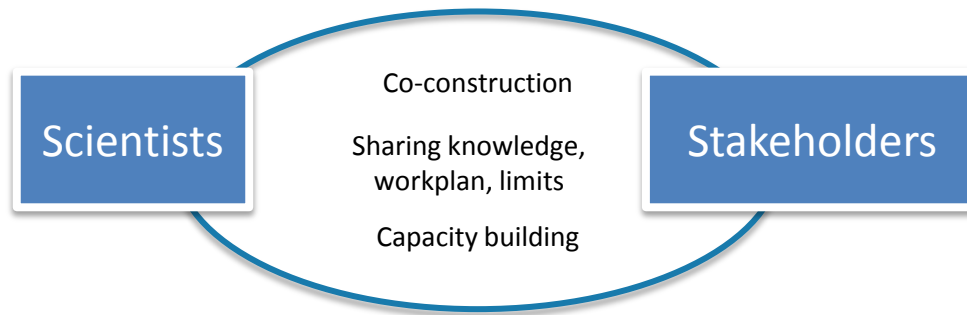
Australia

Results

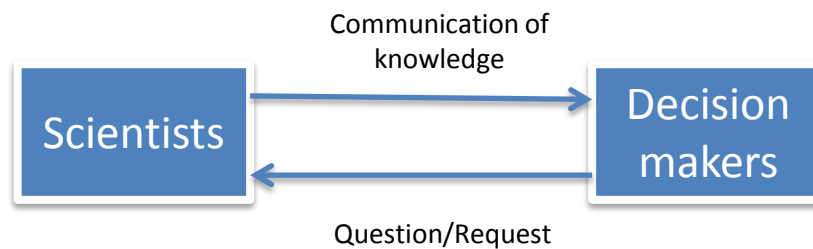
1. Various forms of partnerships and interactions highlighted - often not formalized

Forms of interactions	Case Study	Interactions				
		Scientists-Industry-Decision Makers (Yes/No)	Scientists-Industry (Yes/No)	Scientists-Decision Makers (Yes/No)	Formalization (yes/no)	Permanence / continuity/ project related
Partnership platforms	Dutch Science-industry research cooperation (SIRC)					
	Australian Science-Industry-Decision making process					
	French Partnership bio-economic working group Project					
	Agreement National Research Council / italian administration					
	AZTI-Spanish secretary partnership					
	Irish Discardless Challenge Trials – Research Partnership					
	France Filière Pêche project for self-sampling in Celtic Sea					
Institutional Decision support	STECF- IA and evaluation for the Bay of Biscay Anchovy MP					
	STECF- Western Waters Multi-annual management plan IA					
	ICES- Evaluation of HCR for the Bay of Biscay Sole proposed by the Fishing Industry					
	French National Request on landing Obligation					
	French National Request on impacts of TAC and quotas for the Bay of Biscay Fisheries					
Contractual Projects	A participatory-based mapping of the small Scale Fisheries in the Basque fisheries					
	EU DGMARE DAMARA project in the Celtic demersal fisheries					
	North Sea mixed fisheries research projects, ICES request and DGMARE direct contracts					
	EU project MAREFRAME in the Strait of Sicily fisheries					
	EU SOCIOEC project					
	EU DGMARE project on small scale fishing sector's participation in decision-making - in the western waters					
	Celtic Sea Herring recovery plan and LTMP decision support					

Variety of Scientists-stakeholders interactions - multidimensionnal



Unidirectionnal Scientists-decision makers interactions



2. Various and changing roles of the scientists according to project/ situation/demand

Following roles highlighted-often combined:

- **The scientist as a pure producer of knowledge**
- **The scientist as an integrator of knowledge from different disciplines**
- **The scientist as an integrator of academic and empirical knowledge: co-construction of knowledge, fishermen knowledge integration**
- **The scientist in charge of the information flow to decision makers: from knowledge production to synthesis, communication and use**
- **The scientist as a facilitator for participation**
- **The scientist as a policy advisor**

3. Main Benefits of partnerships

in terms of :

- Trust
- Information sharing and capacity building
- Integration of knowledge
- Facilitating information flow and use of science to support decision

4. Use of results in decision making

- Direct – procedure or window of opportunity
- Indirect – tools, methods, capacity building
- Unknown or very little → poor information and feedback → need for a path to impact

Conclusions

Essential role of partnerships as transdisciplinary platforms for:

- integration of academic and non-academic knowledge/ inter-disciplinary knowledge and expert knowledge to support decisions
- building trust and capacity for engagement in policy process
- Ensure information flow and opening good opportunity window

→ Development of partnerships platforms to be promoted

→ Challenges of diversifying interactions between science and decision-making

Avoiding being lost in translation to transdisciplinary approaches:

→ Issues to be further explored through systematic analyses of case studies experiences and measures of impacts (eg formalized vs flexible partnerships?)

→ Build up networks and develop a community of practice for trans-disciplinary approaches to review experience and promote actionable knowledge to improve decision-support and decision-making process

THANK YOU FOR YOUR ATTENTION



Claire Macher^a, Denis Bailly^b, Marta Ballesteros^c,
Michel Bertignac^a, Francesco Colloca^d, Mike
Fitzpatrick^e, Katia Frangoudes^b, Dorleta Garcia^f,
Marloes Kraan^g, Rich Little^h, Loretta Malvarosa^j,
Simon Mardleⁱ, Arantza Murillas^f, Lionel Pawlowski^a,
Manuelle Philippe^b, Raul Prellezo^f, Evelina Sabatella^j,
Nathalie Steins^g, Olivier Thébaud^a, Clara Ulrich^k

- a. Ifremer, France,
- b. Univ Brest, France.
- c. CETMAR, Spain,
- d. IAMC-CNR, Italy,
- e. Irish Observer Network Ltd, Ireland,
- f. Azti-Tecnalia, Spain,
- g. Wageningen University & Research, The Netherlands,
- h. CSIRO Marine and Atmospheric Research, Australia,
- i. Fishor Consulting, UK,
- j. NISEA, Italy,
- k. DTU Aqua, Denmark

Project SciPaDe - supported by the "Laboratoire d'Excellence"*
LabexMER (ANR-10-LABX-19) and co-funded by a grant from the
French government under the program "Investissements d'Avenir".