

Chapter 1

Bridging the gap

Experiments in the heart of the transition zone

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Abstract

This book is about the on-going transition of fisheries governance and the emergence of research practices and advice frameworks that allow for the co-creation of common knowledge bases for management. This chapter introduces the context under which the GAP project ('Bridging the gap between science and stakeholders') was conceived, describes its overall approach, orientates the reader to key issues and introduces the structure of the book.

1. Introduction

"Our hope for the future is not only to grow the red shrimp fishery, but to grow it sustainably"
– Conrad Massaguer, skipper of the "Nova Gasela", Palamós, Spain.

Conrad Massaguer is a participant in the GAP project's Mediterranean red shrimp case study. A team of scientists led by Dr Joan B. Company, fishermen, and regional policy managers have successfully brought red shrimp stocks back from the brink of collapse. The key to this accomplishment is a collaboratively-produced and voluntary long-term management plan that has the approval of fishermen, Catalan regional and Spanish national government.

The plan is the result of over five year's work; the idea initially conceived during the first phase of the GAP project in 2008. After fifteen joint meetings and a lot of talking, the final draft management plan was submitted to the Spanish Government's Fishery Ministry on 25th July 2013, where it was received with warm congratulations to those involved for having produced the first plan of its kind in the Mediterranean area.

As an example of how shared learning and collaboration on research can lead to positive outcomes for management, Massaguer's hopes for the future of the Palamós fishery reflect the over-arching aspirations of the project partners in the whole GAP project: a thriving, sustainable future for European fisheries. Their story is told in detail in Chapter ten and through a short documentary available at <http://gap2.eu/launch-of-gap2themovie/>.

This book is about the on-going transition of EU fisheries governance, focusing on the emergence of research practices and advice frameworks that allow for the co-creation of common knowledge bases for management. Based on eight years of applied research on collaborative research processes, performed in the 7th framework EU projects GAP 1 & 2, the book examines how knowledge practices in fisheries governance are changing.¹

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2. The transition in fisheries governance and emergence of participatory research

A transition is taking place in the approaches to fisheries management and the research that supports it. In the 2002 reform of the Common Fisheries Policy (CFP), pressure from many simultaneous developments stimulated the then Fisheries Commissioner, Joe Borg, to put strengthening engagement with fisheries stakeholders a priority for reform. Since then, Europe has seen progressive steps to implement this view. To many, the most visible outcome has been the creation of the Regional Advisory Councils (RACs), which are the main body for engaging with stakeholders on issues that directly or indirectly affect fisheries.² Prior to this, fisheries management had conventionally been done in a top-down or command-and-control form, with limited possibilities for stakeholder engagement. In particular, the space for fishermen's participation was restricted when it came to the knowledge basis for management, which was a reserved domain for stock assessment scientists. While the original justification for this arrangement was to secure the legitimacy of management decisions, relying on the generalized trust in impartial science, this did not work as intended. Instead, the exclusion of fishermen in

¹ EU FP7 projects GAP1- grant agreement 217639, GAP2 - grant agreement 266544 www.gap2.eu.

² Under the auspices of the Common Fisheries Policy, RACs were established by Council Decision (EC) 256/2004 with the intention to increase the participation of those affected by the CFP in the fisheries management decision-making process. In the 2013 CFP reform they were renamed Advisory Councils (ACs). ACs are stakeholder-led organisations that provide the Commission and EU countries with recommendations on fisheries management matters http://ec.europa.eu/fisheries/partners/advisory-councils/index_en.htm.

knowledge provision has been recognized as an important weakness of the governance regime, reinforcing important gaps between the policy makers and scientists on the one hand and fishers and fishing communities on the other (Hind 2015).

There have also been big changes in the research arena, albeit with a time lag to the policy aspirations. When the research ideas for the GAP project were first conceived in 2003, they responded directly to the policy need, but it was not until five years later that the signs of change became visible in the research structures and funding mechanisms that traditionally support fisheries and environmental research actions.

In 2008, the GAP project found fertile ground in a different area, called Science in Society – a research policy area interested in society’s relationship with science and its link to inclusive governance. Since then, the EU research arena has witnessed a huge shift in the expectations for collaboration in research, from traditional proposal calls that could be met by collaboration among scientific organisations alone, to calls that expected consultation with (or at least endorsement from) relevant ‘stakeholders’, to calls that specify a requirement for a diversity of relevant stakeholders to be partners in the project consortium and to be involved in the research framing process. GAP has been at the forefront of this transition in the management and research policy landscape, conducting applied experiments in co-creation of common knowledge bases for management, but also fostering reflection among those involved about what it takes to establish effective collaborations, and the conditions that effect the degree of success. We have explored what goes on in the transition zone between top-down management and participatory governance. That is what this book is about. It deals with the knowledge of fisheries and fisheries management and the process of (co)-production and application. It does not aim specifically to address other important issues such as power and interests, and how they affect the gaps in the interactions between ‘stakeholders’ and scientists and governments that they affect. Nonetheless, such issues are at play and sometimes visible in the case-studies.

3. The GAP approach

The GAP project aimed to reduce the tensions that arise between society, policy and science when environmental sustainability concerns appear in conflict with maintaining livelihoods. The approach was to use a process of active participation and knowledge sharing between scientists, stakeholders and policy makers to establish a common knowledge base for fisheries and the build relationships for effective governance.

In the GAP project, the term ‘stakeholders’ refers to all those with an interest in the science and management of fisheries and the marine environment. It’s a broad term that captures many actors from society. But our main focus is on fishermen, scientists and policy makers/managers, because their knowledge and the data that they create, plays a central cog in the application of scientific knowledge to fisheries management. Other stakeholders include fishing communities, dependent industries, Civil Society Organisations (e.g. WWF, Bird Life International, Friends of the Earth, Seas at Risk), private foundations and other citizens. The different interests and responsibilities of stakeholders (from grass roots to international policy) determine the roles they play in the overall governance system. Specifically relevant to the issues addressed in this book is the fact that the term ‘stakeholder’ may be understood differently between its use in political parlance and in the social sciences. Political parlance does not see scientists and government bodies as stakeholders, whereas in social science they are included. (See Chapter 2 for more discussion).

In 2008, phase one of GAP established 13 research case studies (CS) across Europe, each one centered upon working partnerships between fishermen, scientists, and policy-makers. These case studies came to life in GAP2 (2011-2015), which conducted ‘participatory action research’ – an active, collaborative form of science involving those affected by the research outcomes, from the outset of the process, through to the implementation of any outcomes (Mackinson and Wilson 2014). The philosophy underpinning this approach is rooted in the process of shared learning: *"What I hear I forget, what I see I remember, what I do I understand"* (Xunzi340-245 BC).

The premise for this approach is based on the understanding that:

- The evidence-base for management improves if the knowledge of fishermen and their experience are integrated in a meaningful way with scientific and policy knowledge.
- If knowledge is shared and co-constructed, it improves the implementation and effectiveness of management measures.
- If knowledge is shared and co-constructed among stakeholders it improves the support for policy and societal goals to achieve responsible, sustainable, productive fisheries.

Co-constructed knowledge improves the knowledge base for fisheries with regard to credibility, legitimacy and saliency (see chapter 2; Röckmann et al. 2015). Well-designed participatory action research is one strategy that has been shown to be effective in addressing the complex issues of knowledge, participation and decision-making in fisheries management (Reid and Hartley 2006, Johnson and van Densen 2007, Stephenson et al. 2016). In brief, well-

designed means that there is an ongoing interchange based on genuine respect for participants' perspectives and contributions. Participatory action research creates not just a set of new knowledge but a social network of learning, while the action research aspect then seeks to link this network to the decision processes of marine management (Mackinson and Wilson 2014, Stephenson et al. 2016).

The GAP case studies spanned 11 different countries and covered a huge range of fisheries issues. From monitoring coastal cod populations in Norway, assessing crab stocks in the UK, modelling multispecies mixed fisheries in the North Sea, to confronting head-on the realities of a 'discard ban' in the Netherlands. While the specific research questions examined in the CS projects varied, as did the management relevance of the results, all projects were conducted with clear commitment to collaboration.

In one way, of course, the GAP project was intentionally naive. The 14 CS projects presented in this book³ attempted to perform knowledge practices for which the appropriate institutional structures are seriously underdeveloped, producing knowledge products for which there is no ready demand. There are no accepted standards for collaborative research. There are no dedicated review processes to distinguish between acceptable and non-acceptable results. There are no formal training courses to teach best practice. While there of course is hope that the CSs succeed some way or another, this cannot be guaranteed. Instead, the nature of the CSs as experiments means that partial failure and disappointment are to be expected. One of the ways the CSs generate insight and learning is when the idealistic experience informing the collaborative projects meet up with the resistance and challenges of the established order. If transition to participatory governance and collaborative research had been easy, then it would already have happened.

4. Aim and organisation of the book

The stories of the CS projects form the basis of our journey through the subsequent chapters. Presented in individual chapters in a standardized format, each addresses questions intended to bring out their unique characteristics and experiences. How did they come about? How were research objectives negotiated among participants? If scientists took the lead, did the fishers

³ Of the CS projects, 13 were formally included in GAP2. The CS on bycatch of sharks, skates and rays, reported in chapter 16, while not part of GAP, was carried out with reference to the same perspectives and in close contact with the GAP project.

manage to keep up? How did the collaboration work out during the different states of the project? To what extent did the projects manage to carry through the project as planned? What difference did the collaborative research format make, in terms of the credibility and legitimacy of its results? Were the knowledge products made to count in management decisions? Collectively, the answers to these questions describe the complexity of European fisheries in some detail.

While the individual stories of the CS projects are compelling in themselves, the strength of the GAP project is the possibility to place the 14 cases alongside each other, compare them and examine them as pieces in a larger puzzle. Thus, our aim is to make them speak as a collective. In this way, the CS chapters as a collective describe the complexities and variation of European fisheries. In chapter two we give an introduction to the overall GAP approach and elaborate on three key theoretical perspectives central to this project: participation, knowledge inclusion and institutional reform. After the chapters containing the individual case studies, we return to these perspectives in chapter 17, where we apply theory to the practical experiences of the GAP case studies and conclude what can be learned from them with respect to the three issues.

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