

Participatory Research in Fisheries Science Good Practice Guide

Active engagement of fishers in scientific research helps build collaborative working relationships between industry, science and policy sectors, improving the way our resources are managed.



About the GAP2 Project

GAP2 is an international, European Commission funded fisheries research project bringing together scientists, fishers, and policy makers to jointly develop solutions for sustainable fisheries and fishing communities.

GAP2 conducts 13 different collaborative research case studies across 11 different countries, and facilitates exchanges between stakeholders, within Europe and beyond.

GAP2 works on the principle that inclusive research methods produce outcomes in which all players feel they have a 'stake'. Through addressing how to incorporate fishers' experience based knowledge (EBK) into inter-disciplinary research at the forefront of EU fisheries science, GAP2's approach is helping to build a shared sense of responsibility. GAP2 is using this to develop management measures that work for science, society and the environment.

All the work in this document is attributable to the participants of the GAP2 Project and its partners. We encourage those reading this work to share and disseminate the messages and guidance within, and it is free of charge to do so.

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Why is 'Participatory Research' important?

“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's future aspirations for the Palamós fishery reflect the desires of many whose lives depend upon our seas. Environmentally, economically and socially sustainable fisheries will deliver long-standing livelihoods and wellbeing for Europe's coastal communities.

But whereas other stakeholders may feel un-empowered to shape the future of their fishery, Conrad is a participant in a **participatory research** project addressing the sustainability of Mediterranean red shrimp stocks. Working together, a team of scientists, fishers and regional policy managers have successfully brought red shrimp stocks back from the brink of collapse, through the introduction of a collaboratively-produced, voluntary, long-term management plan.

Conrad's collaboration with scientists and local government is an exemplar of how participatory research can lead to positive change.



Fisherman Conrad Massaguer has worked with GAP since the inception of the project.

What is Participatory Research?

Participatory research is a type of collaborative or cooperative research, and therefore about processes as well as scientific outcomes. It enables partners with various perspectives, but common needs, to improve the knowledge base and quality of scientific information. The incentive to do this might be based upon a mutual curiosity for understanding ecology and fisheries, and/or the value the

knowledge has in terms of improving fisheries management. Rooted in respectful and engaging dialogue, the participatory approach deepens individual and collective learning, creating a sense of shared responsibility for action.

Active engagement of fishers and their industry in scientific research helps build relationships that yield long-term benefits to resource management, by reducing tensions that may arise when environmental sustainability appears to be in conflict with maintaining fishers' livelihoods.

Why now?

An environmentally, economically and socially sustainable future for Europe's seas is also the aim of the European Common Fisheries Policy (CFP). In particular, the policy looks to foster a dynamic fishing industry and ensure a fair standard of living for fishing communities. But to implement the 2014 reforms of CFP, collaboration is crucial.

The Common Fisheries Policy's new regional approach means that member states now need to work together to manage fisheries in regions where they share fishing interests. Industry and scientists working closely together will be important in

GAP2 scientists work with fishers across Europe, here seen in the Adriatic Sea, near Italy.



Credit: Jacopo Pesenti

NOTE: STAKEHOLDERS TERMINOLOGY. For the purpose of this document, persons and representatives of organisations that have a direct primary interest in the fishing industry (including individual fishers) are referred to as 'fisheries stakeholders'. This is a pragmatic definition for the sake of brevity. It is not intended to ignore the views or downplay the importance of participation by other stakeholders, whose actions may influence fisheries and whose businesses and lives may be indirectly affected. These other stakeholders include fishing communities, dependent industries, management agencies, Civil Society Organisations and other citizens.

achieving this, so that the evidence behind management decisions is accepted by those whose livelihoods depend upon the outcomes.

What's more, collaboration in research and innovation is central to the principle of inclusive governance, which is embodied within the Ecosystem Approach to Fisheries (EAF): a widely upheld principle in today's fisheries policy.

What are the benefits?

Improved Understanding

- Better knowledge and understanding of issues of common concern.
- Co-education of fisheries stakeholders and researchers.
- Catalyst for new ideas and innovative research methods.
- Greater trust between fishermen and public research institutions.
- Mutual respect gained through shared understanding of challenges, expectations and views.
- Fosters long-term cultural shifts in attitudes, helping to engage wider society.

Improved Sustainability

- Increased compliance with management decisions as fishers have a feeling of ownership over the data provided to decision makers.
- Longer-term agreements can be reached due to improved communication, trust and respect between fishers, the wider fishing industry, researchers and policy makers.
- Development of co-management arrangements catalysed by successful and mature participatory research processes.

Improved Research Efficiency

- Identification of research priorities of direct relevance to resource management.
- Research is more focussed on finding solutions that lead to more sustainable management of the marine environment.
- More efficient use of available knowledge by partnering with existing activities.
- Research methods are continuously improved when exposed to stakeholder scrutiny.

How to do it

Step by Step Guide: THE PROCESS

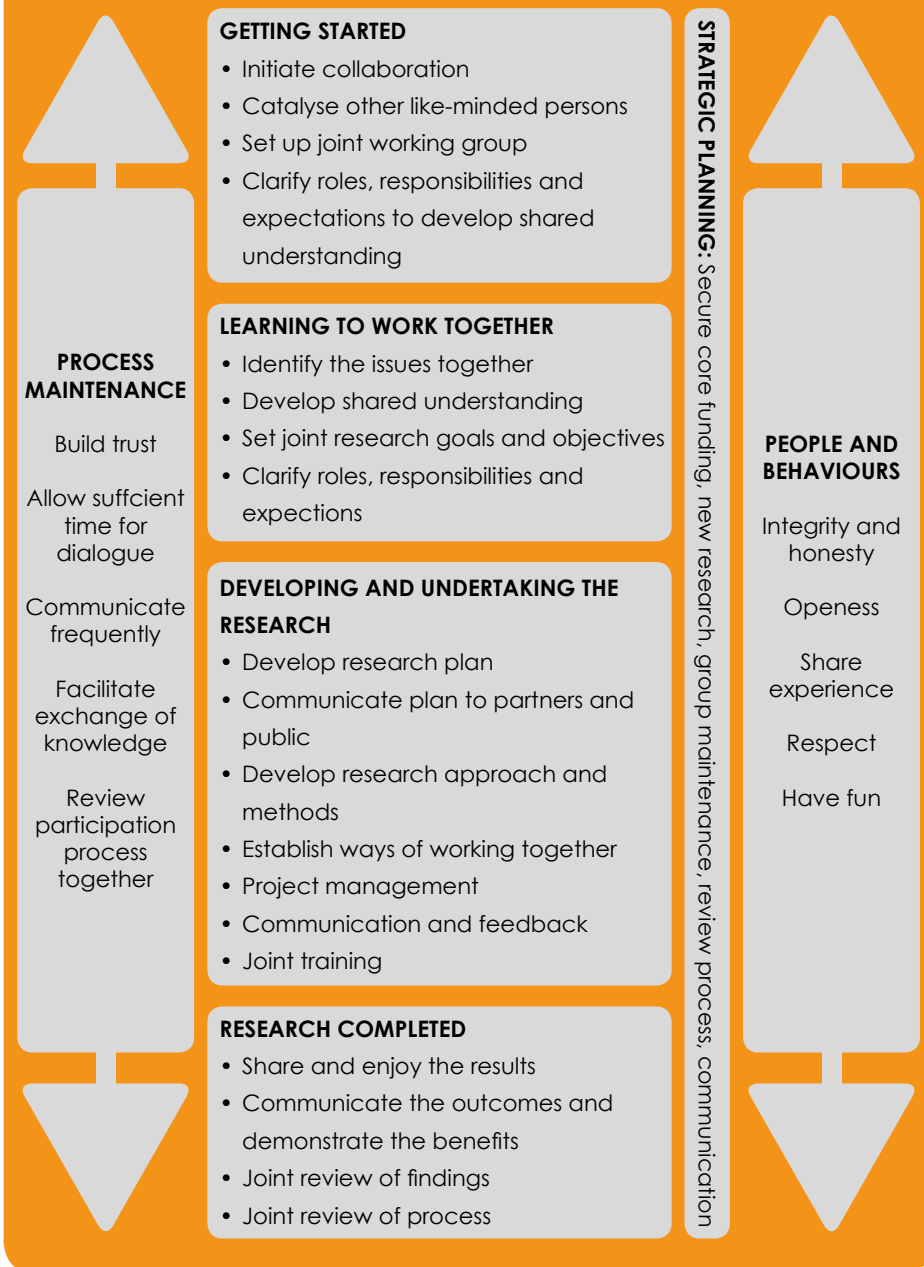
The process of developing participatory research should follow a logical sequence. Practical aspects can be clearly defined by following the steps of good project planning and management.

However, establishing and maintaining the participatory process is arguably the most important aspect in ensuring successful delivery of the project, so good care and planning in the consideration of people's roles and their behaviours is also required. The basic steps of this process are shown below.



Establishing and maintaining the participatory process is underpinned by a relationship of equals between scientists and fishers.

Key stages in the participatory research process



Step by Step Guide: THE PRINCIPLES

Alongside the 'method', certain principles should be followed to foster the most fundamental ingredient of participatory research - a true 'spirit' of collaboration: a willingness to engage with, and incorporate, a range of players and offer equal credence to a range of knowledge 'types'.

The principles below can be applied to both the design and the implementation of the research process to foster such spirit.

1. Inclusivity Inclusivity and opportunity for involvement are critical. The process of gathering participants should begin as soon as possible, should be transparent, and should be extended widely, especially to include stakeholders that may have contrary views.

Users of the data, i.e. policy makers and managers, should also be included as early on as possible.

An important part of managing expectations is to ensure that all participants understand and respect that the research results and their level of certainty might not meet their individual expectations or desires. It is vital to underline that 'research outcomes' are not the same as 'management outcomes'.

Inclusivity is key to collaborative research – here fishers and scientists join in sorting the catch.



Credit: Jacopo Pasati



GAP2 hosted the first fully facilitated meeting between French & UK channel scallop fishers, April 2014.

2. Effective Facilitation

The use of good, neutral facilitators throughout the research process can ease tensions and create a sense of equality amongst participants' interactions. Honesty, integrity, and an open mind, are essential in anyone seeking to facilitate this kind of process.

Facilitators can be essential in enabling effective participation by helping overcome seemingly insurmountable barriers, such as strong prejudices or a lack of open-mindedness amongst participants. They function as brokers of knowledge, working to achieve and maintain mutual understanding through effective two-way communication and building relationships.

There are numerous other personal attributes and skills that help nurture the development of effective working relationships. An ability to listen and ask appropriate questions helps achieve understanding and respect for the knowledge and views of others. An awareness of the social and cultural context of a situation, combined with sensitivity and diplomacy, will help prevent and overcome many small but potentially significant issues. Indeed, in addition to the case-specific aspect of the research topic, the social context must be carefully considered: requiring awareness of different belief systems, and of varying professional and cultural aspects relating to ways of working.

Understanding that each situation is unique, and therefore requires adaptation, will be important for effective facilitation overall.

3. Joint Ownership of Knowledge

Fishers and industry representatives are often concerned that scientists deliberately fail to take account of information that may be unsupportive of existing management rules. Such fears spur mistrust and suspicion, leading to fishers being guarded about their data and knowledge, particularly on where they fish.

Overcoming such issues requires that the concerns, motives, and expectations of fishers and scientists can be discussed openly during collaboration. Building trust and continuous transparency should underpin all aspects of the research design and implementation.

Messages should be clearly communicated to stakeholders and the wider community, in a way that avoids 'jargon'.

Finally, fears or unrealistic expectations about how research results will be used can stifle collaboration. Whilst a sense of ownership should be created around the research, expectations should be managed in relation to what the research outcomes may or may not achieve for participants.

4. Overcoming Institutional Barriers

A number of 'institutional barriers' can often be encountered during participatory processes. These should be considered in advance and overcome collaboratively.

- **Funding:** Participatory research requires adequate resources to 'get it right', with funding needed for both the engagement process as well as specific research activities. Payment or other rewards for fishers' involvement in activities such as data collection and attending meetings must be considered, as it can enable fishers to participate when they might otherwise be unable to do so. However, it is also important to focus on improving the non-financial incentives, so that individuals are motivated to collaborate because of wider benefits to society all round.
- **Reluctance of fishing industry to participate:** This can be a more significant problem when everything is going well for fisheries, and the political will to make changes is less pressing. In times of hardship, innovation and collaboration become more essential. It may be important to communicate to stakeholders

about the improvements in economic performance and efficiency which may arise through development of new methods, or as a result of management actions based on the outcomes of the research.

- **Incentives for scientists to engage:** The publication-based reward system may to some extent deter scientists from engaging in participatory research, due to the length of time participatory processes can take to yield publications. Participants should take care to plan good research of publishable quality, from the outset. They should also be prepared to challenge widely held views of what science is appropriate for publication. Adoption of the principles and practice of Responsible Research and Innovation (RRI) in research funding and performing organizations is a key ingredient to success.

Finding a common language is key to developing productive relationships between research partners.



Credit: Emma Pearson

5. Prioritising Communication Developing and maintaining effective two-way communication is essential for successful collaboration, even if it requires facilitation by a third party. Opportunities for engagement should be maintained at good frequency using the most personal means available (preferably face-to-face or by phone, with email used where clarity is needed in writing). Reflection, feedback, and critical evaluation of the process all help to make improvements and maintain the long-term relationships necessary for success.

Technical jargon in presentations of research should be avoided; concepts and terms should be clearly defined and agreed by the participants. Good communications can be aided by creating opportunities for scientists and fishers to work and learn new things together, and by trying to ensure that the same people are involved for as long as possible.

As an additional consideration, communicating about the research with the wider sector or local community will help set the collaboration in a wider context, and build credibility beyond the immediate set of participants.

6. Planning Participatively Fisheries stakeholders should be involved in all aspects of the research process, but particularly when the focus and scope of research are being decided upon during the initial stages.

Involvement in planning the research provides clear opportunities to address lingering suspicions and develop respect and trust for each other's knowledge. It requires face-to-face interactions that actively engage individuals through brainstorming ideas, setting priorities, defining objectives, developing methodologies, collecting data, analysing and interpreting, dissemination and evaluation.

Key points in planning participatively include:

- Research activities should focus on a well-defined problem of shared interest and be planned to achieve recognizable progress and benefits, but provide sufficient flexibility and contingency to cope with setbacks.
- Plans should look to establish clear mutual benefit and seek early win-wins to build confidence and foster conditions that enable creativity.



- A Research Steering Committee should be established; comprised of stakeholders and scientists that have the commitment and management skills required to ensure that the participatory processes and research activities are delivered to expectations.

7. Battling Participation Fatigue

It is important to respect the time of those involved in the participatory research process. Be aware if they are struggling to engage with activities, and be sensitive to 'participation fatigue'. Discuss how to make it work for one another.

Participatory research activities can be time consuming, particularly in the early stages when regular dialogue is needed to develop a shared understanding and learn how to best work together. 'Participation fatigue' can be exacerbated when those involved are active fishers who must steal time from fishing to engage in dialogue. Finding ways to expand the pool of participants from the relevant group and discussing preferred methods of interaction helps avoid this.



David Andrew Brown

It's important to meet face to face whenever possible to keep participants engaged and happy with the process.

Moreover, the need to think short, medium, and long-term must not be overlooked. Scientists often take a long-term view, unaware of the short-term consequences for fisheries stakeholders. Stakeholders on the other hand, can be frustrated by how long research takes, the lack of accuracy and certainty in results. Understanding this from the beginning can help researchers share their expectations with fishers and avoid 'fatigue' arising from frustration.

Step by Step Guide: THE METHODS

Methodological Toolbox

In collaboration with social scientists, the GAP2 project has produced a researchers 'toolbox' of tried and tested methods to assist participatory research. The toolbox has been designed to be an easily accessible, practical guide and can be used by anyone, from scientists, to policy makers, to fishers.

The full Methodological Toolbox can be found on the project's website at: www.gap2.eu/methodological-toolbox



The GAP2 Methodological Toolbox provides a wide range of 'tools' to facilitate participatory research



Participatory Mapping

Participatory mapping is the most widespread visual participatory method. In marine studies and social research it has been used for many different purposes, especially for natural resource management and for the collection of indigenous and cultural knowledge.

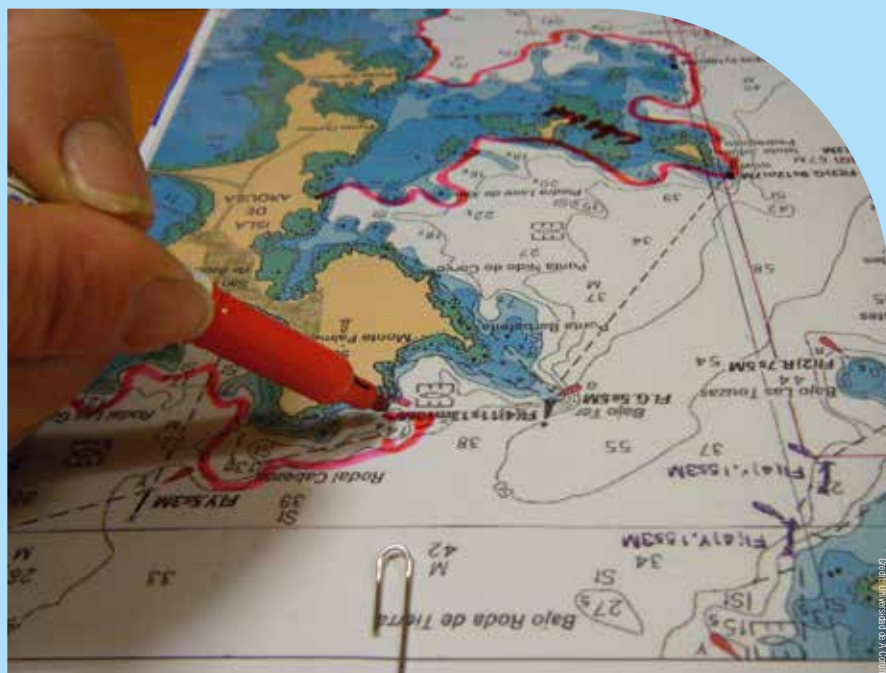
Using this tool is quite simple: individuals or groups of people are asked by a facilitator to draw on a map their (qualitative or quantitative) knowledge about a spatial issue. Subsequently researchers can integrate information from different informants, also identifying categories, typologies, and concepts, and map them.

Further steps in participatory mapping may include the independent validation of maps from another group of informants, or the establishment of focus groups to discuss/refine maps that synthesize knowledge layers and, where needed, reconcile possible disagreements.



Participatory Modelling

Models are simplified, but not simplistic, representations of complex systems that allow us to summarize the relationships between systems' components and predict systems' behaviour. They are intensively used in fisheries and



Participatory mapping in action - an example from GAP2's case study in Galicia.

natural resource management to describe stock status and (socio) ecological processes, according to a set of input data and scenarios.

Participatory modelling relies on the integration of stakeholder knowledge into the process of model construction and hypothesis testing. In this sense participatory modelling differs from modelling itself in that stakeholders may play a role in both the model definition (e.g. select relevant variables, provide qualitative/ quantitative information on variables, set the relationships among them, set the general conditions) and in the selection of scenarios to be investigated (e.g. defining possible management options to be compared).

Moreover, stakeholders contribute to the evaluation and interpretation of the models' outputs.



Participatory Planning

Participatory planning is a process aimed at jointly defining, proposing and preparing the work necessary to tackle an issue of shared interest.

Typically, participatory planning may also include the opportunity to tailor management rules at local/regional scale according to stakeholders needs. With the aim of contributing to the establishment of a bottom-up approach, one can also integrate experience based and research based knowledge.

In order to succeed, participatory planning activities should ensure the legitimacy, saliency, credibility and transparency of the process.



Participatory Sampling

Participatory sampling is a form of direct collaboration between scientists and fishers in the joint collection of data and samples.

True participatory sampling should include a shared approach to the design of the sampling activity, as well as participation in the field activity and discussion of results. Participatory sampling facilitates meaningful dialogue, the exchange of different types of knowledge (eg. experience based knowledge and academic, scientific knowledge) and the building of mutual trust. This

is particularly true during collaborative field activities, where working jointly together fosters the co-operative relationship between fisher and scientist.

Participatory sampling increases the credibility of research outcomes, as it provides data collected with the direct involvement of fishers.

Self-Sampling

In self-sampling, full responsibility for data and sample collection is given to fishers joining the participatory research activity.

With this in mind, the foundation of the self-sampling approach is usually a preparatory activity where scientists and stakeholders work together to define the research goals. This includes determining the methods to be applied for data/sample collection, and how to use the information acquired through the process.

The idea is that fishers not only learn how to apply a standard protocol (e.g. how to measure a fish, how many fish to measure), but that they also understand the rationale behind the scientific methodology. For example, they need to have data that is comparable and potentially replicable, and therefore collected with consistent, standard methods. More importantly, self-sampling allows the fishing industry and stakeholders to play a primary role in data collection on a mutual trust basis, since the quality of the data collected with this approach is directly linked to the stakeholders' responsibility.

Semi-Structured Interviews

Semi-structured interviews are topical, information-rich conversations conducted with an open framework, which allows for two-way communication. They are used both to give and receive information. Where possible, interviews should be conducted face-to-face and in informal settings.

The semi-structured interview is modeled more closely on a conversation between equals than a formal question-answer exchange. The role of the interviewer involves not merely obtaining answers, but learning which questions to ask and how to ask them.

Oral Histories

Oral history is the systematic collection and study of historical information about past events through interviews conducted with people who participated in or observed those events. Oral history is not folklore, gossip, hearsay or rumour. Oral historians attempt to verify their findings, analyze them, and place them in accurate historical context. In oral history projects, an informant or narrator recalls an event for an interviewer who records the recollections and creates a historical record.

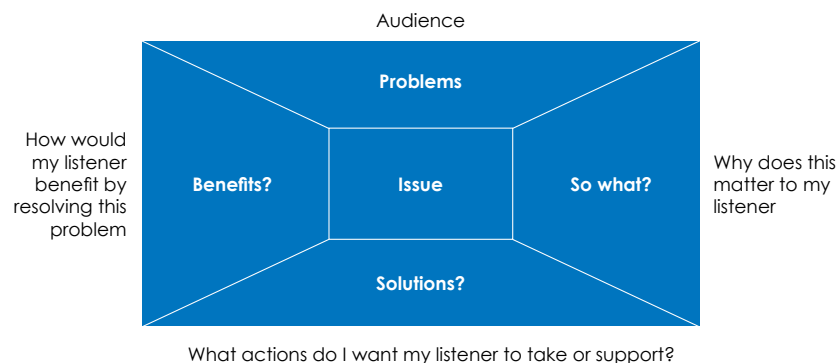
Focus Groups

Focus groups are moderated discussions between five to ten participants. Focus groups are a form of qualitative research, a method for exploring people's attitudes, beliefs, desires, and reactions related to a specific topic. A focus group is a kind of group interview, usually conducted by a moderator in an unstructured and natural way where respondents are free to give views from any perspective. They are typically conducted face-to-face, but may also be organised via telephone conference or the internet.



GAP2 researchers & fishers practice interview techniques at a social science workshop.

Message Box



The Message Box

The outcomes of research can be complicated, caveated and difficult to explain to those from a non-academic background. Yet engaging people within industry, government and beyond is often crucial to the research method, and always essential to the uptake of findings in wider society. Successful communication of research is crucial in participatory research.

The Message Box can be used to distil essential information from both ongoing and completed research, to engage individuals whose contribution is vital, yet hail from a different backgrounds, science-based or otherwise.

The tool works by encouraging researchers to clarify their thinking about the main issue that their work addresses, and importantly, the relevance of their work to their main 'audience'.

Researchers can then use the Message Box to condense the crux of their work into five sentences, explaining the problem, potential solutions and how their work relates to their audience.

The resulting set of concise messages can be disseminated using channels appropriate for the end user, ranging from social media, to newspapers, to policy briefings and events.

Step by Step Guide: THE HOT LIST

Behaviours and actions to encourage and discourage

The participatory tools described by the Methodological Toolbox will only be effective in the context of a genuine, collaborative interaction with other research participants. Through experience in the field, GAP2 has developed a framework of behaviours which contribute towards successful participatory research and actions: The Hot List.

Key messages behind the development of 'The Hot List'.

Messages from the stakeholders

"The hardest thing for scientists is to explain to fishers the long-term benefits."

"It's important to learn about ways of working with fishers and how to convince them of the value of science in helping them to conserve the resource."

"They need to respect traditional/experience-based knowledge and see that it can be used in a systematic way valuable to science."

"Scientists should welcome fishers to science events and come and talk with fishers."



Messages from the scientists



The Hot List: DOs and DON'Ts for successful collaborative research

DO	DON'T
Listen with an open mind	Assert prior feelings or knowledge
Be honest	Make false promises
Respect others knowledge and views	Assume you know more or are 'better'
Explain clearly and give feedback using a language that everyone understands	Assume everyone understands
Ask questions and challenge views	Be afraid to ask questions
Respect and understand the importance of the identity of being a fisher, and the need to make a living	Undermine the motivation of fishers by questioning their need to make a living, or not giving credence to fishers' 'identity'
Include others whose knowledge and views are relevant to the problem	Exclude others who might challenge your views
Be aware of motivations, expectations and agenda	Let motivations and political agenda derail good research
Be aware of the source and quality of knowledge, but treat it fairly	Apply different principles when scrutinizing different knowledge
Question knowledge for the purpose of gaining a better understanding	Undermine credibility
Address problems and issues of common interest	Bias research towards the interests of a particular group
Be clear on the use of research	Hide intentions of research
Agree about data ownership. Be open when possible but respect confidentiality	Unnecessarily protect and limit access to data
Expect criticism of findings	Hide weakness of research
When on board, help out – researchers help fishers and fishers help researchers. Having a practical job makes people feel valued	Isolate yourself by not contributing to the team working on vessels
Be consistent with the people involved	Keep changing the people, because it sends a silent message that the work is not important

Evidence that it works

GAP2 puts collaborative research methods into practice in 13 different fisheries research case studies across the EU, covering diverse such diverse topics as brown crab migration, herring management and marine spatial planning. GAP2's case studies are characterised by participation of scientists, fishers and policy officials in the design and implementation of the research process.

In carrying out participatory research across Europe, GAP2 has collected experiences of the participatory process, and perspectives on both the value and challenges of collaboration. New perspectives, greater knowledge and better policy are just some of the benefits cited by those who have already taken part.



Fisherman Alan Steer contributes to GAP2's case study in Devon.

"Before the GAP2 project started most of my involvement with scientists left me feeling very frustrated. I had helped collect and supply the same data over and over again for different groups, never seeing any returns and in some cases not even knowing if the data had ever been used. But as a partner in the GAP2 project I have felt much more included and can see real benefits for the future.

Fishers and scientists working together through the life of the whole project has meant that I have been able to have some input and influence on the issues researched. This has given me a better understanding of all the implications and trust in the results. This collaboration means the findings have real relevance to our fishery and can give us some of the tools we need to help manage it in a sustainable and profitable way for the future." – **Alan Steer, Skipper/Owner of the MV "Superb-Us", Devon, UK**

"By interviewing old fishermen, I learnt more than I could find in books and scientific journals on history of fishing and fisheries in the Adriatic Sea. Moreover I found fishermen's understanding of marine ecology challenged my knowledge, something I had to deal with." – **Saša Raicevich, GAP2 Scientist, Chioggia, Italy**

"I have been working with the GAP2 project from the beginning. The importance of the GAP2 project here in Palamós is that we have had a great experience of working together with local scientists, from the the Instituto de Ciencias del Mar. We also have direct contact with the regional government." – **Conrad Massaguer, Skipper of the 'Nova Gasela', Palamós, Spain**



Palamós harbour, home of GAP2's 'red shrimp' case study – where Conrad Massaguer contributes to research.

"I would underline the real importance of working collaboratively, with scientists and with the industry. Co-management works much better than other methods, and this is the message that I would offer to other policy makers involved in fisheries management." – **Rosario Allué Puyelo, Directorate General of Fish & Maritime Affairs, Catalan Region of Spain**

"Sometimes you interview...a very, very reluctant fisher, and you wonder if you will be able to get any info. Maybe the fisher is shy, or just believes he is wasting precious time with you. Sometimes it works just to be quiet. If the fisher finally begins to chat... it is funny to realise that they often just can't stop!" – **Pablo Piña Orduna, GAP2 scientist, reflecting on 'participatory mapping' in Galicia, Spain**

"Five intense days of meetings and new impressions from research, management, fish, and fish stocking, brought new thoughts and ideas to the surface...we also gained a deeper understanding of each other's roles and responsibilities within the co-management group." – **Marie Kristofferson, Head of Lake Vättern Fisheries Co-Management Group, participant in the GAP2 Exchange**



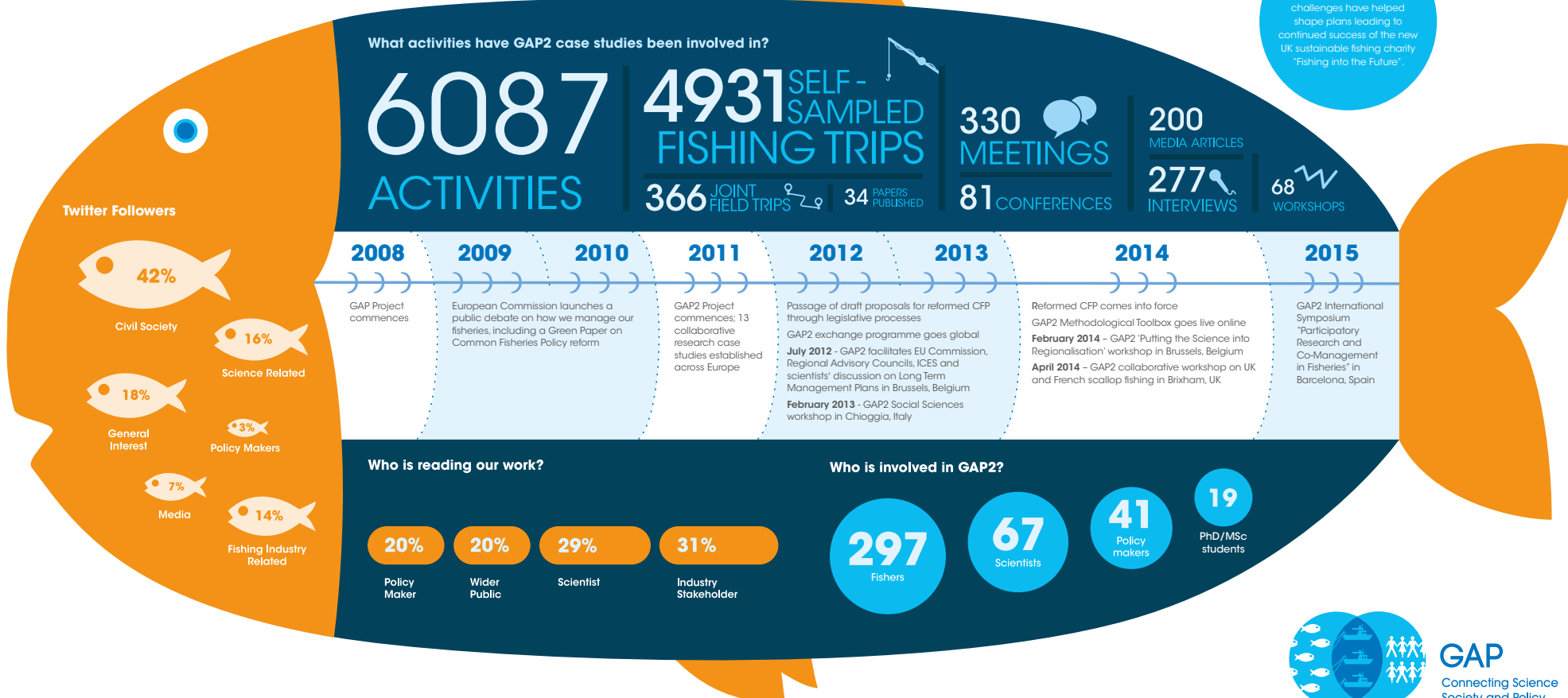
GAP2 scientist, Marloes Kraan, observes and questions a fisher aboard his vessel.

"Around the world we find examples where collaborative approaches to research and management provide outcomes that are better understood and more useful to those involved. With fisheries under pressure from society's demand for seafood from sustainable and responsible sources, engaging in participatory research demonstrates industry's commitment to achieve that."

– **Steven Mackinson, GAP2 coordinator UK**

HOW HAS GAP2 MADE A DIFFERENCE?

GAP2 brings fishers, scientists and policy makers together to conduct 'participatory research' - a form of collaboration that places equal value upon each sector's knowledge. Such research partnerships can provide the knowledge needed to sustainably manage and govern Europe's fisheries, and has already made a difference since collaborations began in 2008.



What's next?

GAP2 is just one example of a wider trend of Responsible Research and Innovation (RRI) projects funded by the EC. It is now necessary that the lessons learnt from GAP2 are targeted to research policy makers and funders, so that they can build collaborative approaches into future research projects. By evolving what it takes to do RRI in practice, and to ensure its utility in management, future work will aim to embed collaborative approaches in a systematic and useful way.

For fisheries stakeholders to become routinely and actively involved in the delivery of scientific advice used in management decisions, continued action is required to:

- Ensure the process has a positive effect on the relationship between stakeholders, scientists and policy makers. The contribution by the fishing industry must make a real difference to the rigour of the scientific advice, and must be recognised by high-level policy makers. Otherwise efforts will continue to be undermined by stakeholders' mistrust of the use of science in decision-making.



Credit: Paul Hampson

Paving a way for the future of participatory research requires foresight and consistent effort to communicate benefits.

- Develop strategic alliances and influence national and European research policies in a clear and persuasive manner. This will enable appropriate opportunities for further development to be created.
- Apply coherent and continuous effort at all levels. Enabling effective participation by stakeholders is a long-term process, and sufficient momentum needs to be developed to avoid derailment by short-term political attention cycles.
- Promote attitudes that facilitate collaboration, while effectively communicating the value of participatory research to high-level policy makers. This needs to be done in a measured and realistic way, otherwise expectations will be too high and will fail to deliver.
- Build the administrative and logistical capacity to enable stakeholders to participate effectively in research.
- Focus upon the evaluation of the participatory process, and learning that can be taken from the experience of the research, not just the outcomes, to ensure the full promise of participation in research is realised.

Participatory Research Projects Worldwide



GAP2 is just one of many participatory research projects worldwide. The success of this approach is evidenced by collaborations in fisheries research alone, stretching from Canada, to the US to Australia.



CFRN - The NSERC Canadian Fisheries Research Network (CFRN) is a unique collaboration among Canada's academic researchers, fishing industry and government.

@ www.cfrn-rcrp.ca

The Network aims to re-shape fisheries research in Canada by bringing together industry, academia, and government in collaborative research on questions of critical importance to industry and management. The CFRN is comprised of a large and growing number of collaborative case studies across Canada. The Network has an emphasis on training, and is developing a cohort of graduate students and post-doctoral fellows who will have direct experience of collaborative research approaches and of academic, industrial, and governmental perspectives.



Ecofishman – 'Results-based management to contribute to the reform to the Common Fisheries Policy'

@ www.ecofishman.com

Ecofishman is an EC-funded project, seeking to develop a responsive fisheries management system (RFMS), founded on results-based management (RBM) principles. Under an RFMS structure, fishers will be given more responsibility for managing and reporting their own activities – creating greater ownership of both data and policy, and building flexible and transparent management measures.



Jakfish – 'Judgement and knowledge in fisheries management'

@ www.wageningenur.nl/en/show/JAKFISH-Judgment-and-knowledge-in-Fisheries-Management.htm

Jakfish is a completed, EC-funded project, which brought together fishermen and scientists to jointly develop flexible and transparent models for fisheries through participatory processes. The project included participatory case studies focussed on a North Sea nephrops fishery, Baltic herring fisheries, and swordfish fishing in the Mediterranean.



Mareframe – 'Co-creating ecosystem-based fisheries management solutions'

@ www.mareframe-fp7.org

Mareframe aims to overcome barriers to the adoption of ecosystem based fisheries management measures, with a particular focus on: lack of scientific cooperation, lack of stakeholder engagement and ownership, as well as institutional barriers.



MEFEPO – 'Making the European Fisheries Ecosystem Plan Operational'

@ www.liv.ac.uk/mefepo

The MEFEPO project focused on the idea of 'ecosystem based management', and developing the appropriate knowledge base for incorporating such management into the Marine Strategy Framework Directive, and the Common Fisheries Policy. The project included a number of collaborative research case studies in three sea 'regions' across Europe.



MYFISH – 'Maximising yield of fisheries, while balancing ecosystem, economic and social concerns'

@ www.myfishproject.eu

The MyFish project aims to provide an operational framework for the implementation of Maximum Sustainable Yield (MSY). A cornerstone of information-gathering for the project was a set of interviews conducted with fishermen from the Faroe Isles, Australia, and Alaska.



DISCARDLESS – The EU has committed to the gradual elimination of discarding.

The 'DiscardLess' project will help provide the knowledge, tools and technologies, as well as the stakeholder involvement, to achieve this.

@ Website not available at time of publishing.

These elements will be integrated by the project into Discard Mitigation Strategies (DMS) proposing cost effective solutions at all stages of the seafood supply chain. The primary focus is preventing unwanted catches from ever being caught. This will involve promoting changes in gear technology and changes in fishing tactics based on fishers' and scientists' knowledge. Secondly, the project will examine ways to make best use of the unavoidable unwanted catch: exploring marketing and supply chain innovations.

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