

Marine CoLABoration Visit to Lisbon 22 - 24 September 2015

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Context and background

Portugal and the marine context

Portugal is a small coastal country and large maritime nation on the southwest edge of Europe with a population of around 11 million. Portugal has three bio-geographical regions, which include the Atlantic and Mediterranean on the Portuguese continent and Macaronesia for the archipelagos of Madeira and the Azores. It is a country with a proud maritime history and a close cultural and economic connection to the sea.

Statistics for Portugal's coast

Statistics	Measure
Land territory	91,763 km ²
Length of coastline	2,830 km
Population within 100km of the coast	93%
Territorial sea (up to 12nm)	50,960 km ²
Exclusive economic zone (within 12-200nm)	1,656,181 km ²
Claimed extended continental shelf (beyond 200nm)	± 2,100,000 km ²

Within the European Union, Portugal has a unique geographical position and a variety of marine and coastal ecosystems that can place it as a champion for ocean stewardship both at the EU and wider global levels. Portugal has an EEZ 18 times the size of its terrestrial territory and a claimed extended Continental Shelf that will bring its maritime territory to 40 times that size. Portugal's maritime zones are home to a wide variety of marine and coastal ecosystems for temperate standards, namely river estuaries, salt marshes, rocky shores, several archipelagos, many seamounts and hydrothermal vents, cold water corals, and close to 200 species of fish with a commercial value. These ecosystems provide key services such as carbon sequestration, marine traffic corridors for over 50% of the European merchant fleet, climate regulation essential for its tourism industry, and generation of pharmaceutical components by organisms living in extreme conditions.

The Millennium Ecosystem Assessment identified five main threats to Portuguese coastal and marine ecosystem services: overfishing, contamination, destruction of ecosystems, territory loss, and climate change. Some of these threats are associated with tourism and recreation activities. In estuaries, major drivers of ecosystem change are urbanization, increased input of nutrients and pollutants, and decreased input of sediments due to upstream dams. The latter is also associated with receding coastlines.

Eating fish is central to Portuguese culture and cuisine. According to NEF's 'Fish dependence 2015 update', Portugal has 'maintained its position as the biggest per capita fish consumer in the EU, steadily increasing its consumption from 29 kg per capita in 1980 to 57 kg per capita in 2011'. By comparison, Spain's per capita consumption is 42.4 kg and the UK, 19.0 kg. Cod, sardine and shellfish are especially popular and there has been much controversy in recent months with the closure of Portugal's sardine fishery and with stricter catch limits recommended by scientists.

Portugal, along with Greece and Ireland, was hardest hit by the economic crisis in Europe in 2008. Many, especially the young and educated, have emigrated to find work elsewhere and many of those

who have stayed continue to experience real hardship. The interest of the Portuguese government in the potential of a burgeoning ‘blue economy’ must be understood in this context.

The NGO sector in Portugal is much smaller than in the UK and the marine NGO sector tiny despite the scale of the country’s marine jurisdiction. There are eight main environmental NGOs with an interest in marine issues, with less than 10 paid staff dedicated to marine issues and approx 15 volunteers. In 2009, these NGOs formed the Platform of Portuguese NGOs on Fisheries (PONG-Pesca) to join efforts in participating in the public consultation on the Reform of the Common Fisheries Policy. They have since established as a key stakeholder in fisheries discussions in Portugal, and are widening their advocacy scope beyond fisheries.

Portugal as a country has shown a keen interest in participating in European and global initiatives that further the research and understanding of marine biodiversity and ecosystems.

Gulbenkian Oceans Initiative

The Gulbenkian Oceans Initiative (GOI) is a five-year programme launched by the Foundation in Portugal in 2013 with a vision of protection, conservation and good management of the oceans and of marine ecosystems. Its main mission is to support the economic valuation of marine ecosystem services. The overall goal of the Gulbenkian Oceans Initiative is to increase public and political understanding of marine ecosystem services as strategic assets for sustainable economic development and for human well-being. It is promoting activities in three domains: research, public understanding and policy action.

Research

The GOI is sponsoring an interdisciplinary study with the purpose of determining the economic value of marine ecosystem services in Portugal. This research is expected to produce policy-relevant scientific findings that contribute directly to the adoption of new policies, changes in existing ones, and management of marine ecosystems.

The research project is being carried out by two leading research institutions, Centre for Environmental and Marine Studies (CESAM) at the University of Aveiro, and NOVA School of Business and Economics (Nova SBE), promoting an interdisciplinary approach, which involves joint work between natural science and social science researchers. Research efforts are focused on the marine area between **Peniche** and **Nazaré** with the purpose of producing a textbook example of economic valuation of marine ecosystem services, and of how these contribute to improve decision-making processes and raise marine environmental awareness.

The lines of research adopted concern (i) the modelling of multiple and linked ecosystem processes and services in the context of decision-making, (ii) the consequences of changes in ecosystem service flows to human well-being, and (iii) the policy instruments that can be used to manage human impacts on those services equitably and efficiently. This will contribute to improve current valuation methodologies, for example by looking into the ecosystem benefits which are indirectly linked to the economic system and for which market values are more difficult to determine. It will also investigate the mutual links between marine ecosystems and well-being, including the impacts that economic activities have on the ability of marine ecosystems to deliver their services.

The final results of the research project are expected in mid-2016. They will be useful for decision-makers, NGOs and businesses to improve their planning and regulatory decisions at the local, national and EU levels. The project's first policy brief, with preliminary results on blue carbon sequestration, the giant wave off Nazaré and the sardine fishery, was published earlier this year.

Public Understanding

Improving scientific knowledge of marine ecosystem services will not be sufficient to achieve a real change in how the public perceives them. As citizens, we only demand protection and better management of what we know to be valuable for our well-being.

The GOI is promoting a varied range of activities targeting diverse audiences – children and youth, researchers, local communities, policy-makers, decision-makers, environmental NGOs, local associations, maritime companies – with the overall aim of increasing their understanding of the importance of marine ecosystem services for human well-being and economic development.

Highlights include a partnership with the Educational Programme of Oceanário de Lisboa to develop the 'World Bank of Oceans' game, which aims to create awareness amongst teenagers of the importance of marine ecosystems human and planetary health and prosperity, introducing concepts from the natural, social and economic sciences.

Another key initiative is to build the capacity of Portuguese environmental NGOs and local associations to influence using economic arguments. The GOI has partnered with NEF to deliver a programme of training which has been adapted from the Marine Socio-Economics Project (MSEP) developed in the UK.

Policy Action

The GOI is promoting within various institutions and organizations the integration of the economic value of marine ecosystem services into their regular activities and decision-making processes, as well as the adoption of monetary valuation methods to support them. It will advance the knowledge and interest of Portuguese institutions in natural capital accounting, and the adaptation of marine governance systems to such input.

The GOI is also promoting the marine ecosystem service approach in public consultations at the local, national and EU levels where it finds it can contribute decisively to improve the knowledge base upon which decisions are made. These decisions include the definition of research priorities, marine spatial planning, environmental impact assessment, and the revision of coastal management plans and of marine protected area management plans.

It is supporting a small number of pilot projects, including an evaluation of the potential for the development of a fisheries co-management process in the Peniche-Nazaré region led by WWF Portugal; and an assessment of the ecosystem services in marine protected areas, with two case studies in the central coast of Portugal's mainland, led by SPEA (Sociedade Portuguesa para o Estudo das Aves), ADEPE (Associação para o Desenvolvimento de Peniche), and GAC (Região de Aveiro).

Summary of the scoping workshops...

‘Valuing the Ocean’ aims to enhance the ability of environmental organisations to communicate the role of the ocean in human wellbeing, in particular by facilitating collaboration between the fields of natural science and economics. The Calouste Gulbenkian Foundation’s UK Branch has decided to take a laboratory approach with Marine CoLABoration to foster engagement and a shared, co-created vision.

The Marine CoLABs are designed to provide the space and resources for a small group of organisations to meet regularly over a two-year period to explore existing practices, and identify and experiment with new ones. Marine CoLABoration is particularly interested in looking at how better to bridge the gaps between innovative local practice and influence at national and EU levels, and how to convey the intrinsic as well as socioeconomic value of the seas. Since January 2015, Marine CoLAB has concluded a scoping phase that included four daylong workshops.

First workshop

In the first workshop, a group of 16 people came together to co-create a range of scenarios for Marine CoLABoration. The aim of the workshop was for participants to get to know each other as creative individuals and glimpse their shared vision(s) for the initiative. Consideration of the oceans inevitably surfaced many 'big' problems, which need multiple perspectives brought to bear to incite meaningful change. Thus the workshop explored the nature of value, economic and social assumptions which impact the significance and complexity of the issues involved.

We began by looking at how Marine CoLAB could change the world. We found that the group is keen to seize opportunities to reframe challenges and find ways to tackle issues from a systemic perspective. To be effective change-makers the participants require appropriate capacities, a youthful, entrepreneurial spirit, and strong connections with people. World-changing happens through trusted collaborations and networks, and often with a strong social safety net. In the process participants may feel excited, inspired, rewarded, free and happy, but also exhausted and frustrated.

We talked about what we know, presume and don't know about valuing the oceans. It was apparent that there is a breadth of knowledge about oceans in the group, yet also some confusion about what 'valuing' oceans actually means and how it can contribute to healthier ecosystems. Rooted in knowledge about the present, we probed what some emerging trends and weak signals might be, and questioned how valuing the oceans could develop. Climate change and the growth economy emerged as the most important, yet most uncertain drivers of change for Marine CoLABoration.

We created scenarios that set the scene for how Marine CoLAB could change the world in four possible futures. A few directions emerged, each of which involved changing the world through establishing or strengthening connections: creating links between the ocean and society, between governments and corporations, it was bridging the gaps between local and global governance of oceans, and working towards sustainable growth by integrating values with innovation.

Second workshop

We looked at what the participants would like to contribute to Marine CoLAB. We discussed which challenges and hypotheses are present in the participants' current work and came up with a few specific experiments to respond to these challenges. Discussions during the workshop included systemic change and connecting disparate actions and experiments, public engagement with rules, valuing the cultural dimension of oceans, as well as the need to change perceptions of marine conservation in general and NGOs in particular. Based on these challenges, the participants designed five experiments that could be implemented in a short time frame (by July 2015), which might also form the basis of longer term investigations within Marine CoLAB:

- The **Systems Change experiment** asked: What traction could we gain as a group if we focus on a single problem? Can we find a common issue to bring our respective resources to? How do we identify a tipping point?
- The **Charm Offensive** would tackle the challenge of changing perceptions of marine conservation (NGOs) in an event for diverse stakeholders.
- **Valuing what matters** suggested creating scenarios and trade-off analysis related to health costs.
- **Gone Fishing (in the Thames)** proposed a case study to test changing perceptions of marine conservation, as part of the North Thames FLAG development for sustainable fisheries. The experiment would include solutions driven discussions (workshops) looking at alternative economies and opportunities.
- **Game On!** explored the question "when is engaging the public the best way of changing the rules and how?" and came up with an idea for a simulation game.

Third workshop

This had a twofold purpose: building on the themes and experiments from the previous workshops and deepening the connections with the participants' organisational contexts and current work. While the first two workshops focused on individual personalities and talents, in the May workshop the participants introduced their professional contexts. These gave some indications about how existing work could contribute to Marine CoLAB and perhaps form new connections for (bilateral) collaborations and experiments. Participants continued their discussion around the three emerging themes of **Systems Change**, **Changing Perceptions** and **Public Engagement**. The discussion presented these themes as broad challenges for Marine CoLAB as a whole and looked at their relationship to the proposed experiments.

The group agreed on two new experiments that will be developed: **Plastic Pollution** and **Transparency of Marine Industries**. Two of the experiments designed in March, Game On! and Gone Fishing in the Thames, continue to be developed but were not discussed in depth during the workshop. Before the designs were finalised, the ideas were tested using a role-playing exercise called a prehearsal to challenge some of the participants' assumptions from the points of view of different stakeholders. The workshop concluded with a design and planning session for each group

to clarify their implementation plans. Follow-up conversations were planned through calls, emails and wiki updates, aiming to have the first experimental results to present at the next workshop.

Fourth workshop

This brought to an end the scoping phase of the Marine CoLAB. The preliminary results of the experiments provided insights that were shared in the group. There were two main purposes for the workshop: to clarify what has been learnt from the experiments and to introduce collaborative processes to enable these (or similar) experiments to be used as a foundation for longer term projects, using an iterative LAB approach. The progress and conclusions from three experiments were explored; Transparency of Marine Industries and blue divestment, Plastic pollution from a systems change perspective and Game On!. Two of the experiments were used to introduce techniques for scaling and extrapolation of the preliminary results.

Reflections from the group

The workshop concluded with sessions to evaluate the outcomes of each experiment, the scoping phase and Marine CoLAB in general. The participants place most value on the collaboration with everyone involved. They appreciate that the workshops have given them time to get to know each other, to learn about the expertise that exists in the group and hear about each other's current work. This has led to interesting contributions to Marine CoLAB. New opportunities have emerged for the group as a whole, as well as several bilateral collaborations. Most participants felt that it was useful to spend time working on the 'big picture' with the intention of translating their insights in practical experiments. This translation was not always easy, particularly when participants' ambitions exceed the time available for implementation between the workshops. The more concrete the experiments became and the more closely related to existing work, the easier it was to commit time and resources to their development. The themes that emerged from the workshops are interesting, although some participants doubt whether they are the most suitable, or sufficiently broad for longer-term initiatives. The group found it challenging to find a balance between a LAB approach (e.g. iterative experiments) and the NGO approach of long-term, high-impact campaigns. The facilitated process was generally valued as a catalyst and way to probe and test the ideas from different perspectives.

For the future, participants are wondering how to create initiatives that are greater than the sum of the work they currently do as individual organisations. More work on stakeholder engagement is needed, as is finding the right balance between inward and outward focused work. Another concern is whether the Marine CoLAB should focus on one or several initiatives. Focusing on a single initiative would have the benefit of everyone's contribution, but it isn't clear whether the whole group could work on a single issue and if a single issue can reflect the complexity of the situation. Even if participants decide to continue working on the existing experiments, they would like to find a way to collect new ideas as they emerge, and maintain a place to discuss and develop them. Towards the end of the scoping phase, as the experiments developed, some participants expressed a need for more open-ended conversations and smaller working groups around specific issues. Time (between the workshops) and focus (of experiments) seem to have been, and will probably continue to be, the biggest challenges for Marine CoLAB.

And looking to the future...

Read the pre-Lisbon questionnaire responses for a caption to this photo...

