Becoming Proactive Agents

Galicia, in the northwest of Spain, has initiated a bottom-up implementation and shared governance scheme for marine protected areas for small-scale fisheries management

In the northeast Atlantic coastal waters of Galicia, in northwest Spain, the bottom-up implementation of marine protected areas (MPAs), as a means to promote the sustainable co-management of small-scale fisheries alongside biodiversity conservation, was initiated in 2003, with the implementation of the Os Miñarzos MPA in Lira.

As elsewhere in the world, the future of small-scale fisheries in Galicia is uncertain and threatened by a range of interdependent factors such as the progressive decline of fishery resources due to overfishing, illegal fishing, environmental degradation and habitat loss; the increasingly fragile economic viability of small-scale fishing enterprises; fish marketing issues; abandonment of artisanal fishing activities; and the loss of local fishing cultural heritage (like traditions, architecture, boats, fishing arts, jobs and ecological knowledge). Considering the great economic cultural importance of small-scale fisheries in Galicia—which in 2004 had 5,565 fishing vessels (of which 4,671 were less than 12 m in length) and 25,756 registered fishermen, out of a population of 2,750,985—it is crucial to address and revert such trends. To effectively accomplish this task, Galician fishermen must see themselves-and be seen by society and by the relevant authorities—as legitimate partners in every stage of decisionmaking related to fishery resource management, which must incorporate their needs and priorities, and value and fully utilize their experiences and ecological knowledge systems through the shared governance of marine and coastal resources

In this context, for small-scale fisheries management purposes, MPAs can provide an effective framework to empower resource users through shared governance arrangements, improve their quality of life, generate new socioeconomic opportunities through tourism and recreation, recognize their ecological knowledge and cultural identity, and contribute to the sustainability of small-scale fisheries and natural resources. The bottom-up

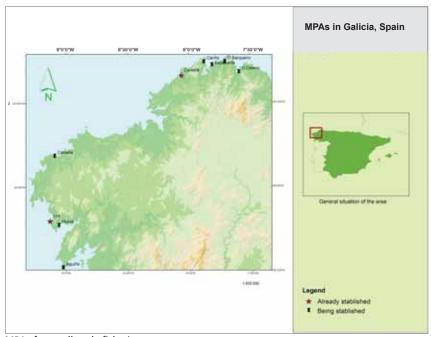
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approach arose as an alternative to the conventional top-down fisheries polices of local authorities, which failed to deliver sustainability, encouraged non-compliance among resource users, and invested substantial resources in inefficient enforcement mechanisms.

Local fishermen's organizations

In Galicia, the implementation of MPAs for small-scale fisheries management is a process led by local fishermen's organizations. It started with a proposal by the *Cofradía de Pescadores de Lira*, based on fishermen's detailed and function-oriented knowledge about the marine ecosystems and species that they exploit. (*Cofradía* is the Spanish term for fishermen's guilds, which are traditional organizations that include all the fishermen working

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MPAs for small-scale fisheries management purposes already established or being established in Galicia

in a certain geographical area, and have a democratic structure with two representative groups—of owners and crew—who elect an equal number of members to the executive bodies of the organizations.) The formulation of this proposal started in 2003, four years before its promulgation in 2007, technically supported by the Fundación Lonxanet para la Pesca Sostenible. It subsequently received the necessary financial and legal support from the Autonomous Government of Galicia ('Xunta de Galicia') for its implementation.

The bottom-up implementation of an MPA for small-scale fisheries management purposes in Galicia comprises several methodological phases.

The creation of the Os Miñarzos MPA in Lira generated important methodological and legal precedents that were acknowledged by the Galician government for the future implementation of such MPAs, opening the door for other fishermen's organizations to initiate similar processes. The Ría de Cedeira MPA was the second of its kind to be decreed in Galicia, on 29 January 2009, followed

by five other initiatives—Aguiño; Muros; Camelle; Cedeira, Cariño, Espasante and O Barqueiro; and O Celeiro—all of which are currently in the design stage, including one (Cedeira, Cariño, Espasante and O Barqueiro) that is being carried out by four fishermen's organizations working together (see figure).

The MPAs for small-scale fisheries management purposes being implemented in Galicia (locally known as Reservas Marinas de Interés Pesquero) correspond to Category VI ("Protected area with sustainable use of natural resources") of the IUCN classification. They aim to promote the sustainable exploitation of fishery resources by balancing the social and economic needs of human communities with the maintenance of healthy and biodiverse ecosystems. Thus, these MPAs are designed and planned to preserve and restore areas of significant importance as spawning, nursery and feeding grounds for commercially valuable fish and shellfish species; promote sustainable and responsible fishing practices; generate livelihood diversification opportunities value-addition strategies; encourage scientific research, environmental education, public awareness recreational opportunities: and implement participatory and inclusive fishery resources management mechanisms based on socioeconomic and environmental sustainability criteria.

The bottom-up implementation of an MPA for small-scale fisheries management purposes in Galicia comprises several methodological phases, all of which are underlined by the fundamental principles of participation, legitimacy, representativeness, shared governance, and the use of traditional ecological knowledge systems.

Transparent process

Additionally, these processes demand the use of transparent and efficient communication and information mechanisms. Therefore, to initiate such a process, it is essential to legitimate it within the fishermen's organization itself, ultimately by voting for it; to

elect a Committee of Representatives, which would normally include external facilitators who gather periodically to work on the MPA proposal; and to establish efficient communication and information channels among resource users to enhance their participation during the whole process. During the meetings, the Committee of Representatives starts by identifying the main features that will influence the MPA design and planning. Fishermen's experiences and traditional ecological knowledge are the major sources of information used to thoroughly characterize the area in terms of resource uses and users. threats, conflicts, most productive fishing grounds, annual fishing cycles, species life cycles, key habitats, and so on. Integrated in a geographical information system (GIS) database, this information will provide the basis for decisions on the MPA location, size, shape and zoning, and subsequently on how resources are to be used and protected. Therefore, at the end of the Design Phase (as at the end of every phase), it is very important to organize a plenary session (or a General Assembly, in this particular context) with all the fishermen to legitimize the proposal elaborated up to that point by the Committee of Representatives.

Subsequently, during Planning and Management Phase, the Committee formulates a Preliminary Management Plan defining long-term goals, identifying and prioritizing management needs, and proposing adaptable regulatory measures to address these needs in each one of the previously identified management zones (no-take zones, protection zones and use zones). Regulatory measures applied to use zones generally comprise restrictions on recreational and commercial fishing on the type of gear and the number of devices per vessel or fisherman, catch limits, minimum landing sizes, and seasonal closures.

The Committee will also discuss fishing rights allocation, biological and social monitoring, capacity building, performance evaluation, surveillance and enforcement, funding and selffinancing, and the functioning of the co-management body. After being subject to consensus approval in the Committee, the final proposal for the MPA must be voted for during a General Assembly, and adjusted, if necessary, in order to be submitted for government approval. In case of an affirmative feedback, the participatory formulation of the MPA establishment decree is initiated.

The Implementation and Shared Governance Phase starts with the election of the official MPA

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co-management body (Órgano de Gestión), which will be composed of an equal number of government officials fishermen's representatives. and This body is responsible for the co-management of the elaboration of its annual operational plan, co-ordination of monitoring enforcement activities, for the development of internal communication channels and external communication strategies. The content the Preliminary Management Plan should be complemented and



Fishermen preparing the bait on a longline fishing vessel in Cedeira, Galicia, Spain. Small-scale fisheries management in Galicia is sometimes led by fishermen's organizations



A fish auction market in Cedeira, Galicia, Spain. Fish marketing issues often hamper the development of small-scale fisheries

continuously reviewed, updated and adapted by the co-management body, according to the new knowledge generated by the management process itself, and by monitoring outcomes, and through continuous consultations with fishermen.

The implementation of MPAs for small-scale fisheries management purposes in Galicia is a recent phenomenon with a lot of potential to develop and strengthen. From our experience in Fundación Lonxanet para la Pesca Sostenible, a nongovernmental organization (NGO) working directly with these processes, the effectiveness of this kind of MPAs would be reinforced by developing strategies to increase co-ordination among stakeholders, by drawing on other experiences through mutual learning processes and networking, by strengthening internal communication channels, by developing efficient external communication strategies and promoting public awareness campaigns on the importance of small-scale fisheries, by implementing efficient conflict resolution mechanisms, by strengthening the relationship between

fishermen and the government, and between fishermen and NGOs, by increasing management flexibility, and by reinforcing monitoring and evaluation processes.

Above all, it is important to bear in mind that the implementation of MPAs for small-scale fisheries management purposes involves a continuous process of social change and empowerment, with the potential of reconverting small-scale fishermen into proactive agents working towards the sustainable management of coastal and marine resources.

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www.mardelira.net

Cofradía de Pescadores de Lira

www.fundacionlonxanet.org

Fundación Lonxanet para la Pesca Sostenible

www.recopades.org

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