

An Integrated Approach

The French experience shows that if fishermen are convinced of the potential benefits of marine protected areas, they will take an active part in their implementation

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On 31 March 2007, the Collectif Pêche et Développement, a French non-governmental organization (NGO) working on issues related to fishers and fisheries, held a workshop in Brest, France, on marine protected areas (MPAS) from the fishermen's perspective. The location was symbolic as the new agency in charge of managing MPAS countrywide will be based in Brest. The workshop was primarily aimed to highlight the importance of the Parc naturel d'Iroise, in which fishermen are significant stakeholders. Participants were invited to analyze the linkages between fishermen and MPAS, and to outline how these could become management tools for fisheries. They drew from two overseas case studies—Arguin National

Assumes new importance. It is necessary to examine how MPAS relate to ongoing fishing activities, and how they could serve fisheries management objectives. Some environmental NGOs view them as a panacea. Greenpeace, for instance, is campaigning for a Global System of Marine and Coastal Protected Area Networks, where fishing would be banned, and that could cover up to 40 per cent of the world's oceans, while claiming that it is all meant to preserve aquatic resources and thus the interests of artisanal fishermen.

In France, during the campaign for the recent Presidential elections, the coalition of environmental NGOs reaffirmed the objective of turning 40 per cent of the French exclusive economic zone (EEZ) into no-fishing marine reserves. French fishermen have long been familiar with *cantonnements* (marine areas where certain fishing operations are banned), but with this 40 per cent target for strictly restricted zones, it is clear that the focus is essentially on conserving biodiversity as such, and not on the sustainable use of fishery resources. The challenge for fishermen now is to show that they are capable of carrying on with their activities while fully respecting the ecosystem on which they depend.

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Park in Mauritania (PNBA), and another in Portugal—and two in France (Iroise Marine Park in Brittany, and Cantonnement du Cap Roux in the Mediterranean).

The debate on MPAS has gathered momentum globally since the World Summit for Sustainable Development in Johannesburg in 2002. With the spread of MPAS, the tenets of fisheries management are undergoing great changes, and the need for the ecosystem approach to conserve biodiversity as-

Case studies

From the Mauritanian and Portuguese case studies presented at the Brest workshop, it appears that conflicts may arise between the fishermen and the marine reserve managers. The Banc of Arguin National Park (PNBA) case was presented by Yan Giron, a young

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fisheries scientist. Established in 1976, the PNBA is one of the oldest and largest MPAs worldwide. It is inhabited by a population of Imragen, an ethnic group with strong cultural traditions, whose livelihoods depend on fishing and pastoralism. Their peculiar method of catching mullets with the help of dolphins is well known.

The primary objective of those who established the PNBA was to protect its rich bird populations. The vast tidal mudflats are a unique resting and feeding place for many migratory species of birds. Later, foreign observers realized how plentiful fish resources were in the same area, which fishermen had been exploiting for a long time. In the 1990s, some danger signals began to appear, with the guitarfish stocks, for example, dwindling to near extinction. By the end of the decade, several measures were initiated to protect the park from outside operators coming in with industrial boats or motorized canoes, and also to regulate the fishing effort of the Imragen dwellers. A limit of 100 was placed on the number of traditional sailing craft, and, in 2004, a ban was imposed on shark fishing.

Control measures apply essentially to fishermen living outside the park, and they resent the situation as the proscribed area extends to as much as a third of the entire Mauritanian coastline. Only subsistence fishing is officially permitted inside the park, but, given the availability of the resource and the potential for profits, commercial fishing exists. The park's promoters and fisheries policy managers, acting in league with local leaders, had not provided for such a development. The respective roles of the various stakeholders (government representatives in charge of the park, fishermen and conservation managers) have not been properly defined. Though the PNBA is one of the best-managed MPAs in west Africa, there is room for improvement, which could lead to more equity in the sharing of advantages, better integration of conservation objectives and sustainable fishing operations.

The case study of Portugal was presented at the workshop by Marc Savary, a geographer. Portugal's first marine reserve, situated in the south of the coun-

try, near Setúbal, is the continuation of a mainland natural park, which was established to conserve biodiversity. Close to 2,700 persons are involved in subsistence and artisanal fishing activities in the 57-sq km area. Many of them are unemployed or retired persons with meagre pensions. Due to the economic crisis in the Setúbal area, their number has increased. Some are illiterate, and their average age is 56. Illegal fishing, including by diving, is a frequent occurrence. In the course of time, with the aging of the population, such activities are bound to recede. The park's authorities have not really taken into account that social problem, nor are they addressing the issue of illegal activities by recreational fishers.

The organized small-scale fishermen are demanding that current rules and regulations be effectively implemented before any restructuring of the park is done. Considering that the management plan disregards their claims and interests, they have now withdrawn from discussions for the marine reserve. They also say that major sources of industrial pollution are still unchecked. They feel they are the only ones to suffer from the creation of the park. The conflict seems to arise from a lack of consultation between the au-

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A scene from Doelan Harbour, Brittany, France. Organized small-scale fishers in France are now demanding effective resource management plans

thorities and the fishermen, and from the absence of appropriate action in the face of pressing social problems.

There are a number of small marine parks on the French part of the Mediterranean coast. In some of them, fishermen are closely associated with their management. In recent years, fishermen have, on their own initiative, established new reserved areas with help from dedicated biologists, for instance, the *cantonement* of Cap Roux on the Côte d'Azur promoted in 2004 by the local *prud'homies* (traditional fishermen's organizations) in collaboration with scientists from the University of Nice.

Preliminary observations show an improvement of the biomass inside the reserve, but it is too early to expect any improvement outside the protected area. That may happen later, as indicated by the positive results obtained elsewhere, for instance, in Corsica. The strategy adopted by fishermen is to create a network of small reserves along the coast that would hopefully increase the recruitment in the fish population. While some scientists question the validity of such an approach to improve fish availability, local fishermen appear satisfied. They are also able to keep recreational fishers at bay, to some extent.

The most conclusive experience comes from the marine park of the Côte Bleue, near Marseille, established in 1983 and covering 10,000 ha. Fishermen have been closely associated with its management. The park includes two integral reserves (no-take areas), and 3,000 cu m of artificial reefs were put in place to provide shelter for the fish and block access by trawlers. Fishermen are very happy with the functioning and impact of the park, and they have given

ways and means to mitigate the negative impacts of maritime traffic and discards of all sorts.

The Iroise Marine Park in Brittany is of a larger scale: 300 km of coastline and 3,550 sq km of ocean space. The project started in the early 1990s in the minds of some biologists who, in 1988, had obtained, under the Man and Biosphere Programme of the United Nations Educational, Scientific and Cultural Organization (UNESCO), funds for the creation of a biosphere reserve on the islands of Ouessant and Molène. They later asked for an extension of the buffer zone as the area adjoins the world's busiest maritime route and, consequently, is under the threat of pollution from tankers and freighters. It is of great biological significance, having the largest seaweed beds in Europe (300 known species), marine mammals (seals, dolphins) and birds. About 40,000 tonnes of algae are extracted annually; 350 boats manned by 900 fishermen are in operation. To this, one can add 10,000 recreational craft, plus transiting French nuclear submarines. Clearly, this is a region crying out for integrated coastal management.

The *comités locaux des pêches* (fishermen's organizations) were at first hesitant to engage with the park process; then they realized that the project could become a significant instrument to promote the interests of artisanal fisheries, as long as the objectives of conservation and the tenets of sustainable fishing could be pursued side by side. So they proposed to conduct, within the park, a pilot scheme on resource management and rehabilitation of depleted lobster stocks. Some fishermen remain suspicious, and a number of recreational fishers are particularly hostile to more constraints and controls. The administrative process is also bedeviled by local political feuds. Just before the recent presidential elections, some politicians pressured the government to hold on to legal sanction for the park, despite 15 years of discussion.

To clear the legal way for the project, the Natural Parks Act had to be amended, because while natural parks aim essentially at conserving nature, marine parks (which are established on State property) must cater to the

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the green light for its extension. Thanks to the park, they have been able to negotiate with the port authorities of Fos, a neighbouring industrial region, on

twin objectives of habitat and species preservation and economic development. The Iroise Marine Park does not include integral reserves. It will have a management plan and a management committee in which fishermen will play an active role, and will make proposals to be implemented through the existing fisheries management bodies. Fisher leaders view the project as a real opportunity to promote coastal fishing by bringing in innovative initiatives, and developing collaborations with the recreational sector and environmentalists.

There is a lot at stake in this challenge. It has to be demonstrated that, in order to protect ecosystems, one can do without vast integral reserves. Indeed, one can protect and conserve the environment while continuing with sustainable fishing operations.

Thanks to integrated management measures, these two objectives may not be mutually opposed. The best way to invalidate the rationale of some environmental organizations for the creation of global marine reserves networks to cover up to 40 per cent of ocean space is to work towards the success of the Iroise Marine Park project.

In conclusion, French artisanal fishermen seem to be adequately involved in the MPA processes. This is not quite the case in other European countries. The approach on the Mediterranean coast differs widely from that on the Atlantic coast, because of particular aspects in the respective historical backgrounds and ecosystems.

The co-operation phase is necessarily lengthy. It takes a long time to agree on common objectives and strategies—15 years—in the case of the Iroise Marine Park. This has much to do with the complexity of the territory and the diversity of its activities. Fishermen are not the main opponents of marine parks. The recreational fishing sector is often more powerful and reluctant to accept MPAS.

It is imperative to address the issues of nature conservation and fisheries management with an integrated approach. Establishing a reserve without applying simultaneously a management plan in the adjoining areas will produce limited results. Once fisher-

men are convinced of the potential benefits of the project, they will take an active part in the implementation of the conservation and management measures. 

For more

www.cdcf.no/fishery_forum_2006?p=6966

Marine Protected Areas (MPA)—a useful tool in fisheries management? Comparative experiences and lessons from developing countries and Norway. Centre for Development Co-operation in Fisheries

depts.washington.edu/mpanews
MPA News from Marine Affairs Research and Education and the University of Washington

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Rocky seascape off Doelan Harbour, Brittany, France. Regions like this call for integrated coastal area management