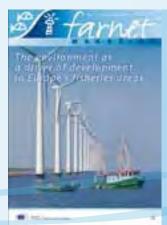


# The environment as a driver of development in Europe's fisheries areas





# Contents

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#### Green growth for the blue economy: why protecting the environment is good for Europe's fisheries areas

The protection and sustainable management of environmental resources should not be seen only as a constraint, but also as a means of safeguarding key assets, and an increasingly important source of jobs and development in fisheries areas.



#### **Report: All in the same boat** In the Pays d'Auray (France), an area facing severe pressure due to the escalating price of land, Axis 4 of the EFF is supporting the efforts of shell-

escalating price of land, Axis 4 of the EFF is supporting the efforts of shellfish growers, fishermen, farmers and other local stakeholders to preserve the local environment, water quality and primary coastal activities.









# Spotlight: Sustainability at the core of the new European Maritime and Fisheries Fund .....23

With negotiations on the European Commission's proposals for the new European Maritime and Fisheries Fund (EMFF) expected to continue throughout 2012, the time to begin planning the programmes for the 2014-2020 period is now!

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# Editorial

# "The environment and employment, on land and at sea"

The environment, the central theme of this latest *FARNET Magazine*, is a v ast subject area, ranging from the restoration of fisheries resources to the ecologically responsible development of entire areas.

Some 250 FLAGs are now active in the European Union, mobilising around 5 000 local actors, more than half of whom come from the fisheries sector. Their role is crucial, not only in confronting the environmental challenges facing the fisheries sector and coastal areas generally, but also in seizing the formidable opportunities that can arise in this field when dialogue, consultation and collective creativity all come together. This is the subject of a new guide being produced by FARNET and a seminar in Portugal in June 2012.

The central objective of the new Common Fisheries Policy and its financial instrument, the future European Maritime and Fisheries Fund, which is presented in this issue of the *FARNET Magazine*, is to restore the viability of fish stocks. This is the essential precondition to enable the fisheries sector to return to viability, to create new jobs and to guarantee EU citizens a stable and safe supply of fisheries and aquaculture products.

FLAGs can play a key role in encouraging local fisheries communities to innovate and experiment with new, collective approaches for the reasonable and responsible management of their fisheries resources, and thereby contribute to safeguarding and promoting the maximum number of local jobs. "Building healthy fish stocks is ultimately a way to increase fishermen's income" insists Jacqueline McGlade, Executive Director of the European Environment Agency, who speaks at length in this issue of the *FARNET Magazine* about her hopes for greater convergence between environmental and fisheries objectives.

Another goal of fisheries policy is to enable fisheries and coastal communities to benefit from a more diverse local economy.

Areas that depend on fishing are generally rich in terms of their ecology, heritage and landscape, all of which are formidable assets for their future development. Yet they are also fragile and the challenges they face are many and daunting, as illustrated by the reports on Huelva (Andalusia, Spain), which has experienced major job losses in the fisheries sector, and on the Pays d'Auray (Brittany, France), where the extreme pressure on land is leading to many conflicts.

Many different initiatives have been introduced to promote sustainable development policies capable of addressing both the challenges and the opportunities. The territorial approach of Axis 4 is one of them, with a number of unique features: constructed around fisheries communities, it provides a mechanism for the progressive development of a shared vision of the future, and on this basis, for experimenting with new forms of development, to create new jobs and new activities on land and sea, while also safeguarding fisheries and environmental resources.

Of course, this new approach is in its infancy in many areas: the oldest FLAGs are just three years old and many newer ones were set up less than a year ago. Before this collective intelligence really begins to bear fruit, we need time to get to know one another, and to build mutual trust and understanding.

We are at the beginning of a long voyage, but as the president of the Pays d'Auray FLAG rightly says: "we are all in the same boat".

**Yves Champetier,** Member of the advisory group, FARNET Support Unit

# why protecting the environment is good for europe's fisheries areas **Green growth for** the blue economy

The protection and sustainable management of environmental resources should not be seen only as a constraint, but also as a means of safeguarding a key asset, and an increasingly important source of jobs and development in fisheries areas.

Mounting concern regarding the overexploitation of natural resources and the emerging threat of climate change have focused renewed attention, in Europe and elsewhere, on efforts to promote environmental protection and more sustainable forms of development. In fisheries areas, a key priority is the conservation and sustainable management of fish stocks, which is essential to safeguarding the long- term health of the fisheries sector.

Understandably, these initiatives, while necessary, are not always viewed positively by those whose livelihoods are directly affected. Quotas, periodic closures and other measures to conserve fish stocks, for example, are often seen as a constraint and a threat to the viability of fishing businesses and fishing communities.

However, efforts to promote environmental protection and sustainable development should not be seen only in these terms. There is now a growing recognition of the inherent value of the environment to society, especially in terms of the vital ecosystem services it provides. These services include not only the production of food, energy, clean water and other essential resources, but also the regulation of our climate and the provision of space for recreation and cultural activities.

Damage to or loss of environmental assets impacts on the provision of these services, often with a significant cost to the communities concerned, as well as to society generally.

Environmental protection can, therefore, provide many direct and indirect benefits for fisheries areas, both in terms of productivity, by ensuring the sustainability of fisheries activities, and in terms of attractiveness and quality of life, by providing a clean, healthy living environment.

These benefits can also be a source of new income and employment opportunities.

Fisheries areas can, for example, target the growing market for products that respect strict sustainability standards, while other opportunities are also emerging in areas linked to the green economy. The ways in which FLAGs can intervene in all these areas will be explained in the next FARNET guide on *"The environment as a driver of the development in fisheries areas"*.

# Profiting in a protected environment

Experience shows that fisheries communities can take advantage of such opportunities, to ensure not just environmental, but also economic and social sustainability. A g ood example is the Ria Formosa natural park in Portugal, an area where fishermen, shellfish producers and other local producers are increasingly involved in developing new businesses that exploit the area's high environmental standards.



▲ Boreal Baltic coastal meadow preservation in Estonia: stems of junipers are used for fencing.

Through activities such as ecotourism and the use of environmental certification (in the production of eco-salt, for example), local entrepreneurs are finding new ways to generate income and create jobs, thereby helping to strengthen the resilience of the local economy, as well as the ecosystem services on which it depends.

Meanwhile, fishing remains an important activity. In fact, approximately 80% of all clams exported from Portugal are cultivated in the Ria Formosa, where sea bream, sea bass and shrimp are also abundant. However, because fishermen now have alternative employment options, the potential to reduce pressure on the fisheries resource is greatly enhanced.

In the Azores, a local decision to ban the hunting of whales was the catalyst for the establishment of a number of new whale and dolphin watching businesses. These businesses have continued the traditional practice of using watch towers, preserved from the days of hunting, to spot whales and dolphins. In addition to the economic benefits, these new eco-businesses also have a s trong educational element and now make a valuable contribution to promoting the conservation of these important species.

## Getting more from less

In other fisheries areas, the drive for sustainability has acted as a catalyst for local communities to seek new ways of increasing the value to their catch. In the province of Huelva, in Andalusia (Spain), for example, the unsold catch from thirty local boats is now being used in the production of high quality fishmeal. Before this, local fishermen had to pay to have their unwanted fish incinerated. Now it is collected at no cost to the fishermen and converted into a valuable raw material for the local fisheries sector (see special report on page 18). Invasive species can also be a source of added value. In the Brittany region of France, for example, a local company has developed a process that allows it to commercially market the slipper snail limpet (*Crepidula fornicata*), which is considered an invasive species in Denmark, France, Italy, the Netherlands, Norway, Spain, Sweden and the UK.

Local chefs have been putting the *Crepidula* on their menus for over a d ecade now. However, the limpets had to be hand-shelled, which is very labour intensive. It was only when a local company, Britexa, developed a cold shelling process using sea water that larger-scale, commercial production became possible. This product is now marketed, not just for its nutritional qualities, but also for the positive environmental impact of its harvesting and consumption.





Fishermen and scientists work together in a joint research project to minimize by-catch and promote the sustainable exploitation of whitefish stocks in Lake Vattern (Sweden).

Other fisheries areas have exploited special environmental certifications to add value to their products. Several eco-labels certifying the sustainability of fisheries have emerged in the last decade, for example. The most widely-known are the Marine Stewardship Council (MSC), Friends of the Sea (FOS), Naturland and KRAv (for Germany and Sweden). This kind of certification has been shown to have a positive impact on the marketing of fisheries products.

# Ocean stewardship

The fisheries sector and fisheries communities can also benefit from taking a m ore active role in the conservation process itself. While there is sometimes a p erception that the agenda of conservationists and the scientific community is at odds with the interests of the fisheries sector, it is increasingly recognised that the sustainable management of fisheries resources can only be achieved with better cooperation, data sharing and mutual understanding between these communities. The European Commission has previously highlighted the potential role of fishermen as 'guardians of the sea', performing 'environmental and other services to the community'. In its proposals for the new European Maritime and Fisheries and Fund (EMFF), the Commission also include measures to support the participation of fishermen in conservations activities (see article on the EMFF on page 23).

Fishermen's practical knowledge of the sea and inland waterways can be invaluable when it comes to the collection of scientific data and the implementation of conservation measures. The presence and wide dispersal of fishing vessels also provides a readymade infrastructure for monitoring and observation activities.

In the UK, for example, scientists from CEFAS, the UK's Centre for Environment, Fisheries & A quaculture Science, work with fishermen in the framework of the Fisheries Science Partnership (FSP). The FSP provides a mechanism whereby scientists can draw on the vast knowledge of fishermen in order to obtain more accurate information about the state of fish stocks.

Fishermen in turn benefit from having a direct involvement in proposing, designing and participating in research projects, and also in terms of the opportunity this provides to diversify their activities and generate additional income.

## The green economy

The global response to environmental challenges, in particular climate change, is also creating new opportunities in many other sectors, some of which are particularly well suited to fisheries areas.

The rapid expansion of the offshore renewable energy sector is a good example. In partnership with other actors, fisheries communities can play a greater role in the development of this sector and can position themselves to benefit financially from offshore projects, either through service provision, or as project partners or promoters.



Conservation of Audouin's gull in Valencia (Spain).



▲ Bird-rich wetlands around the Gulf of Finland.



In Scotland, for example, the recently established Shetland Marine Energy Partnership, a private, public and community sector partnership, provides a mechanism for local community participation in the development of the Shetland Islands' marine energy resource.

The initial focus here will be on the development of a pilot ten megawatt wave project. This experience will then inform a strategy to enable the whole Shetland community to share in the economic and social benefits of the areas considerable ocean energy potential.

▲ Fishing village in a Natura 2000 site in Greece.

Local community participation in such initiatives can also be an important means of overcoming conflicts, especially where there are direct impacts on fisheries or other traditional activities.

A recent study by the Flemish Institute for Agricultural and Fisheries Research (ILvO) in Belgium highlights the benefits of this kind of engagement in relation to offshore wind farm developments. The study suggests that while such developments can lead to restrictions in shipping and large scale fishing activities, it also underlines the considerable potential for smallscale, passive fishing and mariculture within wind farm zones.

### FLAG support

This emphasis on cooperation and partnership; be it with scientists, conservationists, local authorities, or with other local stakeholders, is vitally important if fisheries communities are to be successful in benefiting from the protection and sustainable management of their local environment.

The fisheries sector cannot operate in isolation. There are many other sectors that depend on or impact on the same environmental resources and new relationships must be forged if the needs, and indeed the vision of fisheries sector actors is to be taken into account.

Fisheries Local Action Groups (FLAGs) can play an important role in facilitating this kind of integration. In Marennes-Oléron (France), for example, the local FLAG partfunded the recruitment of a designated fisheries sector coordinator, responsible for ensuring that fishermen were fully integrated into the process of developing a Marine Natural Park (MNP) in the area.



The fisheries sector coordinator, with both as cientific and fisheries background, not only represented the fisheries sector in the MNP process, but also proactively informed fisheries actors about the process, summarising the technical information and communicating it in a user friendly way.

In the Pays d'Auray, France, the local FLAG has supported the establishment of local groups that bring together fisheries professionals, local authorities and other stakeholders in order to combat pollution that impacts on local shellfish production. The ultimate goal is to help local authorities to develop action plans to tackle the problem, assigning specific responsibilities by sector.

Although this project is still on-going, it has already helped to develop a better understanding among local stakeholders of the issues involved. It has also helped local fishermen to better understand what they can do to identify and minimise pollution and, importantly, it has helped to put them on an equal standing with other local players, including those involved in pollution control (see special report on page 9).

# A stake in the future

Looking to the future, public policy, supported by public opinion, points strongly to the continued expansion of the green economy, with a g rowing emphasis on environmental protection and sustainable development.

These developments will continue to impact on fisheries areas, and fisheries communities have much to gain from being proactive in embracing the opportunities that this presents.

Rather than waiting for other interest groups or organisations to set the agenda, the fisheries sector should take the initiative and engage with all stakeholders, not only to articulate the views and concerns of the sector, but also to ensure that fisheries communities fully exploit the potential for local economic and social development.

FLAGs can play an important role in facilitating this, by encouraging and supporting the fisheries sector in working in partnership with other local sectors and interests, as well as by taking a lead role in mapping local environmental capital and identifying opportunities linked to both its protection and sustainable exploitation.

Raising environmental awareness in Brittany (France)

Report

# WATER AND A QUALITY ENVIRONMENT: A PRIORITY FOR THE PAYS D'AURAY FLAG

[FRANCE]

# All in the same boat

In this attractive part of Brittany, facing severe pressure due to the escalating price of land, Axis 4 i s supporting the efforts of shellfish growers, fishermen, farmers and other local stakeholders to preserve the environment, water quality and primary coastal activities.



"The response to the TK Bremen accident showed that there can be a high degree of solidarity between elected representatives, government administrations and citizens, as well as among oyster farmers and fishermen," says Françoise Evanno, President of the FLAG Pays d'Auray, in reference to the astonishing fact that, less than two months after it ran aground in the Ria d'Etel estuary, the cargo ship, TK Bremen<sup>1</sup>, had been completely dismantled and the rehabilitation of the contaminated sites almost completed. "We have learned the lessons of the Erika<sup>2</sup> and it is true that solidarity is not just an empty word here," confirms Alain Bonnec, member of the Joint Association

of the Ria d'Etel<sup>3</sup>. "But I also think that the various collective actions taken in recent years have enhanced the cohesion and responsiveness of the territory."

By "collective action", Alain Bonnec is referring in particular to the establishment of a Natura 2000 site and the running of an integrated coastal zone management (ICZM) project, both operations that required consultation between all stakeholders in the Etel river basin.

▲ Le Palais on the island of Belle-IIe-en-Mer.

- <sup>1</sup> Caught by a s torm, this ship would drift until it ran aground on 16 December 2011, on a beach off Erdeven, in the Pays d'Auray. In total, 60 000 litres of fuel oil spilled into the sea and one hundred cubic metres of sand was affected by the pollution. The pollution control plan was quickly triggered, and managed to limit the damage. Damaged beyond repair, the ship was completely dismantled during the month of January 2012.
- An oil tanker that sank on 12 December 1999, spilling 37 000 tonnes of heavy fuel oil along the coast of Brittany.
- <sup>3</sup> A ria is a coastal inlet, a drowned river valley that remains open to the sea.

# A case study of collective action by coastal players The Shellfish Charter of Morbihan

Shellfish growers, the State, local authorities and other stakeholders collectively developed a c harter to take the sector into account in regional planning.

The French *département* of Morbihan is the largest in France in terms of the area dedicated to shellfish farming, and the second largest in terms of production. It is also the main area in Brittany when it comes to shellfish farming, and with over 350 businesses involved, the sector features prominently in the local economy, providing around 1 100 jobs and generating a turnover of 50 million euros per year. It also plays an important role in the history of the coastal landscapes of the *département* and in the culture of the local people.

A sector of mainly individually-owned businesses, and with a highly seasonal workforce, shellfish farming remains very vulnerable. Apart from the crises of shellfish mortality that hit the sector from time to time, including one that has been raging since 2008, it is also hampered by the pressures of urban development, deteriorating water quality and land use conflicts along the coast. Shellfish processing buildings being converted into second homes is a particular concern for which no solution has yet been

found. This phenomenon has accompanied the gradual reduction in the number of shellfish farms recorded over the last few years. The result is a weakening of the sector, the rising cost of land for oyster farming, making it more difficult for new farmers to establish themselves, and difficulties due to conflicting land uses and genuine shellfish health problems along the coast.

Faced with these problems, shellfish producers have responded by building partnerships with the State, the General Council of Morbihan, local authorities and the Coastal Conservancy. These partners have mobilised in search of shared solutions and developed a charter, signed in July 2011.



Shellfish processing facilities.



The charter has no legal value but derives its strength from its collective development and the mutual commitment of the partners.

The signatories to the charter undertake to contribute to the implementation of the following objectives:

- > Strengthening the protection of shellfish areas in planning documents.
- > Controlling the quality of water through holistic, coherent sanitation programmes in the territories involved in shellfish farming, the optimisation of water quality monitoring and the upgrading of sanitation systems.
- > Discouraging changes in the use of shellfish processing facilities by informing professionals, communities, acquirers and curbing unauthorized development of these premises, including by the use of sanctions.
- > Monitoring and controlling plans for diversification or the partial change of use of processing facilities.
- > Anticipating and organising the cessation of activity, managing the rehabilitation of concessions.
- > Establishing a mediation structure to mitigate conflicts of use and monitor the implementation of the charter.
- > Controlling the impact of shellfish farming on landscapes and biodiversity and engaging with the waste management sector.
- > Building a sh ellfish farming observatory and establishing a partnership arrangement for the monitoring of the sector. In the Pays d'Auray, three EFF Axis 4 projects run by the Regional Shellfish Farming Committee of South Brittany are contributing to the achievement of this last objective.



"For the ICZM, for example, we met all the users and residents along the watercourse," says project manager, Chloé Cordelier: "The growers of oysters and other shellfish, professional and recreational fishermen, farmers, pleasure boat users, hunters, hikers... This created links between people and with the territory... "

The Ria d'Etel is typical of the whole Pays d'Auray of which it forms part: a territory that is both rural and maritime, home to coastal communities where fishing and agriculture are still important, but where the many natural and cultural assets have stimulated the growth of tourism and urban development, resulting in increased demand for land and conflicts between various types of use. Kristell Jamme, director of the Pays d'Auray, summarises the situation: "Tourism is al ong-established activity here, due to spa therapy, but has more recently focused on all-out 'residentialisation' - 44% of homes here are second homes - resulting in lower incomes and higher costs for local authorities, not to mention the increasing difficulty young people have in accessing housing...". Francoise Evanno adds: "Our strengths are also our weaknesses. The tremendous complementarity between the rural and maritime has an extremely strong environmental impact, which gives the territory its soul but also its fragility. The challenge is to reconcile the primary activities – fishing, aquaculture, agriculture - with tourism and urbanisation. In this regard, water quality is a key factor and an indicator of the progress made."

▲ Tending to the oyster beds.

With the overall aim of creating an environment conducive to maintaining and developing sustainable shellfish farming and small-scale fishing, the FLAG Pays d'Auray has therefore made water quality an environmental priority of its strategy for the territory. "The 'Working Together for Water Quality' goal takes up 460 800 euros, a large share of our budget," says Astrid Hirsch, coordinator of the FLAG. "This is obviously not a new concern, but we are aiming for 'environmentally responsible' development. We want to support and broaden the scope of the approaches that involve stakeholders, such as those conducted by CAP 2000 for the past twelve years."

# CAP 2000

Founded in 2001 as a result of local disputes between farmers and shellfish growers over the deterioration of water quality, the association CAP 2000<sup>4</sup> brought together about a hundred shellfish growers, farmers and fishermen from the south coast of Brittany to discuss issues relating to water quality. The association has two objectives: to maintain primary activities on the coast and preserve water quality, while also fostering dialogue between interested parties. The first CAP 2000 success was the signing, in 2002, of a good practice charter by farmers along the coast and shellfish growers, a first in France. "It was a matter of reconciling the two activities," says Sébastien Lemoine, a self-employed oyster grower and president of the association. "Farmers and shellfish growers actually form a chain, the former being upstream in terms of pollution

risks. We have a shared interest: to ensure the survival of businesses and their healthy co-existence.

But we also have a shared fear, of seeing continued urban development along the coast, without any room for primary activities. However, if we disappear because of pollution, quite a lot of the tourism, which is laraelv based on our heritaae, will also disappear." Under the charter, the two professions have, therefore, pooled their resources and are committed to cooperating. In practical terms, everything must be done to ensure impeccable bacteriological quality of coastal waters and hence of the shellfish produced in the coastal growing areas. For farmers, this means treating their animal waste on site and limiting spreading on the land. "Although, in the Pays d'Auray, where cattle farming predominates, agricultural pollution is much less pronounced than elsewhere in Brittany," Sébastien Lemoine points out.

"What is interesting," comments Pierre-Yves Roussel, coordinator of CAP 2000, "is that it is local producers who are the actors of the system. We are mandated primarily to run the activities in the field and raise the expectations of professionals." On a d aily basis, the association works to identify sources of pollution and carries out environmental observation. In consultation with professionals, it selected sites for testing, performs the necessary analyses and then makes the results accessible to all the stakeholders.

<sup>&</sup>lt;sup>4</sup> "C.A.P." stands for *Conchyliculteurs* (shellfish growers) – *Agriculteurs* (farmers) – *Pêcheurs* (fishermen). *Cap* is also the French for cape.





The River Etel ICZM project has led to the installation, on numerous sensitive sites, of signs providing information for different types of users.

For example, CAP 2000 publishes a quarterly newsletter on the quality of shellfish waters that summarises the results of analyses carried out by various institutes and networks. "We are observers, not inspectors," stresses Pierre-Yves Roussel. "We are plugging a gap. Nobody else is doing what we are doing."

As this approach coincides perfectly with that of Axis 4 of the European Fisheries Fund (EFF), CAP 2000 has been running a project since 2011 to train and run local groups, comprising professionals, local authorities and other stakeholders concerned about water quality. The aim is to extend the association's activities to a maximum number of shellfish growing sites in the area and to identify and reduce sources of pollution. Indeed, several shellfish beds of the Pays d'Auray were downgraded in 2010 due to bacteriological quality (i.e. from A to B all year round, or from A to B for part of the year<sup>5</sup>). In areas not covered by a watershed, no coordinated programme to identify sources of bacteriological contamination existed. The Axis 4 project enables this gap to be filled, and is contributing to the restoration of water quality across the entire area.

<sup>7</sup> www.huitres-de-bretagne.com

▲ In the Ria d'Etel.

## Water observatory

«Many water quality monitoring and analysis networks exist in the territory but they are not coordinated,» says Hervé Jenot, president of the Regional Shellfish Growers' Committee (CRC) of South Brittany. "Each network operates to its own purpose and with its own methods. Apart from the excellent work that CAP 2000 does, none of the data from these monitoring networks is compiled, cross-referenced or made use of, which is unfortunate.

There is no real water governance at territorial level. In 2010, following the downgrading of shellfish growing areas and in the context of the Shellfish Growing Charter<sup>6</sup>, we created a w orking group involving all the organisations connected with water quality. We came up with the idea of creating a water observatory, a project that Axis 4 has enabled us to implement, and in which other projects supported by the FLAG, such as that of CAP 2000, play an important role."

The water observatory aims to present to shellfish growers, in a clear and visual way, the cross-referenced data from the latest scientific surveys and field activities on the theme of water quality in the Pays d'Auray. The project was carried out in four phases: identification of the actors, collection and synthesis of data and ongoing actions regarding water quality, clarifying the results, and setting up a website<sup>7</sup> with a GIS-type map viewer. "The dissemination of results is a very important project because it is a way to keep the shellfish growers motivated," says Sonia Gachelin, project leader at the CRC. "In addition to informing them, we want to show them that, despite the downgrades, a lot of effort is going into restoring water quality."

On the same model, and always with implementation of the shellfish charter in mind, CRC South Brittany ran another Axis 4 project to carry out a study of the shellfish industry in the Pays d'Auray. This was based on a "socio-economic observatory", in which all local businesses are considered. The main purpose is to demonstrate the role that shellfish farming plays in the economy, the environment and the life of the territory, and to make its voice heard in discussion on future development strategies.

## Sponges

Shellfish farming does not just mean oysters, but all the biodiversity associated with them, which is surprisingly valuable. Indeed, another project has just been approved by the FLAG: testing sponges as water filters. Marine sponges develop naturally near the oyster beds and the growout bags used to grow oysters, and are known to actively filter large volumes of water<sup>8</sup> in order to extract the suspended organic matter (bacteria, viruses, dinoflagellates...) on which they feed. At the same time, they accumulate pollutants (heavy metals, PAHs, PCBs...), sometimes in large quantities. Moreover, they are an extraordinary source of defence against the pathogenic micro-organisms they collect and could, therefore, have applications in the health sector. In collaboration with shellfish growing businesses in the Pays d'Auray, the University of South Brittany will spend three years exploring this

<sup>&</sup>lt;sup>5</sup> Classification in category B (average water quality) makes it mandatory to purify the oysters prior to sale.

<sup>&</sup>lt;sup>6</sup> See text box.

<sup>&</sup>lt;sup>8</sup> Depending on the species, sponges can absorb 0.02 to 0.84 ml/s of water per cm<sup>3</sup> of tissue, which can represent a filtration of up to 20 000 times their volume per day.



▲ Sorting of oysters in the Cadoret company.

potential. The experiments will be performed in the laboratory and then in situ in a shellfish-farming basin, as well as in open water at two pilot sites in the Ria d'Etel and Quiberon Bay.

Other projects supported by the FLAG concerning water quality are also under way in the Pays d'Auray: one, run by the Permanent Centre for Environmental Initiatives of Belle-Ile-en-Mer, aims to educate boating and yachting enthusiasts to better respect coastal waters. Another, called "COMCOQ", in Quiberon Bay, seeks to improve knowledge about the spread of bacterial pollution in order to minimise the impact on the various oyster production sites in the basin.

### Waste

But water quality is not the only concern for the shellfish growers in the Pays d'Auray: waste management is also an increasingly important issue. Since 2008, the sector has seen a considerable increase in oyster mortality rates, with serious consequences for production, profitability and the accumulation of waste.

François Cadoret runs one of the ten largest oyster farming companies in the Pays d'Auray. Employing six permanent and 12 seasonal workers, the company produces oyster brood stock in deep water. Following significant oyster mortality in recent years, production fell from 800 tonnes in 2008 to 200 tonnes in 2011, a crisis exacerbated by the growing impact of predators such as sea bream and starfish, as well as others like sting winkles, which find the dead shells that have accumulated on the

seabed a conducive environment in which to grow, thus undermining the oyster brood even further. To address this aspect of the problem, the company is carrying out a clean-up of its sites and retrieving dead shells, which then have to be disposed of. "For a long time, it was not a problem," says the local businessman, "because there was lower mortality, and therefore less waste. Farmers and municipal highway authorities were able to absorb the shells, the former to improve their soil, and the latter to fill the roads. Today the situation has changed completely, even though waste management has become a European priority. But I have found a new outlet: to use these shells as a growing medium for oyster larvae, instead of buying materials in the Netherlands and Denmark. I used to buy 80 m<sup>3</sup> per year at a price of 4 700 euros, so it's cheaper and it takes a lot of trucks off the road." The CRC has also submitted a project, together with the Farmers' Cooperative of Morbihan, to the General Council, which concerns the setting up of a collection system, "so that the shells can be removed without costing the producers anything."



▲ Pile of shells awaiting removal for processing.

### Image

"This area has a very positive image, largely because southern Brittany, and the Pays d'Auray in particular, have managed to conserve their environment," says Anne Guillaumin-Gauthier, head of the fish auction market in Quiberon. "This positive image, particularly in the eyes of an affluent clientele, benefits the products."

In fact, the thirty-second largest French auction by volume (1 300 tonnes per year), but the eighth in average prices (4.5 euros per kilo), deals with high value products such as sea bass, sole, sea bream, lobster and shrimp, which are sold to the famous Parisian restaurants "and even att he Cannes Festival," says Ms Guillaumin-Gauthier with pride. The Quiberon auction is also involved in an Axis 4 project: conducting a feasibility study on a workshop for processing seafood that is iconic to the area, such as scallops, for which sales as a w hole have been severely restricted since 2009 because of a toxin originating from phytoplankton and accumulating in the shellfish. Ms Guillaumin-Gauthier and her team would like to take over a former fish wholesaling building to shell the scallops. This would make it possible to remove the part not affected by the toxin, which could then be sold. The building would also be used for processing other species such as sardines. "We would work with a j obseekers' centre. It would employ two shifts of eight people in summer and for the end-of-year holiday season. A trip we made to Galicia, financed by Axis 4, was very interesting, because all these products are already being sold at auction there."

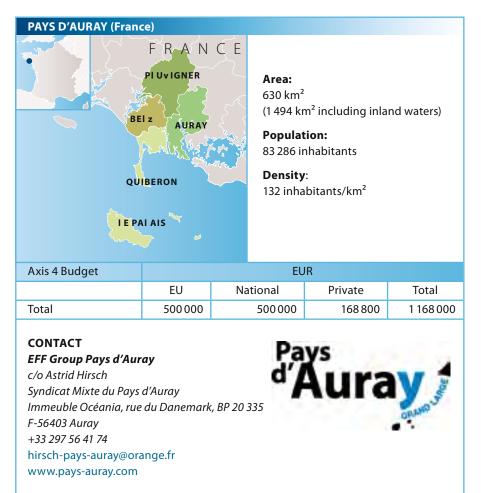
## ScoT

"The area has been a host to many activities, now it must become an actor in its own right, and with Axis 4, people really do get involved," says Kristell Jamme. "Beyond the financial aspect, which in France is modest, the appeal of Axis 4 lies in the fact that this is an excellent tool to bring all local stakeholders to the table, to show that everyone is responsible at their own level." In a region where fishing activities are linked to genuine socio-economic issues, the "Axis 4 method" and the projects it helps to develop and interconnect, is actually an instrument of regional planning and a tool for the "territorial coherence scheme" (SCoT) that the Pays d'Auray is in the process of developing, with a d eadline of June 2013.

As mentioned in the FLAG's strategy, the implementation of the Axis 4 programme represents an opportunity to realise the ambitions and strategic directions already laid down by the territory, by offering a multi-sector and transversal approach, a source of innovation and value added. The linkage between the Axis 4 programme and the proposed SCoT strengthens the area's integrated approach, which is consistent with its ambitions for sustainable development and solidarity. Françoise Evanno sums it up nicely with this anecdote: "When we invited the elected officials of non-coastal municipalities to join the FLAG, one of them said: 'But why should we?'. They had not realised how many of their inhabitants, working in processing for example, depended on fishing... and that through the economy of an entire territory, fish also had an impact on their local area. They then realised that we were all in the same boat, and they came on board!".



▲ 44% of houses are second homes.



# Interview

# **Jacqueline McGlade:**

"The idea that we are going to take the last fish out of the water is very short sighted; there are far bigger stories that the fishing industry can, and must tell." Professor Jacqueline McGlade is a leading marine biologist and environmental informatics professor and the current

Executive Director of the European Environment Agency (EEA).

#### FARNET Magazine: Given your background as a marine biologist and former fisheries scientist, what kind of future do you see for Europe's fishing industry?

If we look back 10 or 20 years ago, consumer taste in relation to fish was very conservative, but I think the growing interest in eating fish as part of a healthy diet, is, and will continue to force the industry, particularly the off-shore industry, to recognise that people are increasingly looking for greater diversity. Some of the stocks that were previously fished for animal food, for example, are now making their way onto people's plates. This is probably the greatest opportunity available to the industry right now and it needs to build on this. So when I think of the future of Europe's fishing industry, I think that if it responds well, not so much to the academic idea of ecosystem man-



Jacqueline McGlade, Executive Director of the European Environment Agency

But fisheries communities must also recognise that in addition to the fishing rights they enjoy, they also have responsibilities. Most fishermen want to remain fishermen, but this ambition means they have a r esponsibility to do more than simply reduce their catch or number of days at sea, they also need to be proactive: looking at consumer demand, encouraging new species, engaging with chefs a lot more, and being much clearer about their role in surveillance. All of these things really do matter and must become part of the daily business of fishing communities.

Sustainable development implies environmental protection and conservation, which very often means costs or reduced productivity. Can the longterm benefits out-weigh these negative impacts?

agement, but to the idea of consumer demand and working with chefs and those who are genuinely changing consumer views, then the likelihood is that we will not only have more resilient fishing businesses, but also a more resilient marine ecosystem.

#### In this context, what in your view should fishing communities now be doing to ensure they have a viable and sustainable future?

Overall, I would say that fisheries management in Europe has to be more differentiated, it has to have small-scale fishing that is not just an extension of off-shore large scale fishing, and it definitely needs to have a more inclusive representation of stakeholders, including consumers. About 80% of the fleet is considered small scale and coastal, which means the potential to exploit this diversity is definitely there, and I would hope that we see this reflected in the revision of the Common Fisheries Policy. Absolutely, sustainable development is by nature a long-term process, which has different phases and needs in terms of adaptation. What people perceive as negative impacts are only so in the shortterm, until conservation measures produce results. For example, it has been estimated that restoring 43 EU fish stocks from current levels to maximum sustainable yield (MSY) could generate as much as 3.53 million tonnes of additional landings and an additional value of EUR 3.188 billion annually. This is more than five times the annual fisheries subsidies paid to EU Member States.



Adoption of sustainability measures should be considered as strategic. Building up healthy fish stocks is ultimately a way to increase fishermen's income. But there also needs to be a greater appreciation of the role of fishermen in protecting the public good that they benefit from. Every second breath we take comes from the oceans and we should not forget that. Communicating and profiling the fact that people who work in and take care of the marine environment are actually providing a valuable service to society, and not just with the fish catch, but also through cultural and health benefits, are really important messages. I think that those involved in the fishing industry have got to do more to promote this.

#### Many fishing communities see marine protected areas (MPAs) as a source of constraints rather than opportunities. In your opinion, how can such designations benefit local fishing communities?

MPAs are a really important tool in managing fish stocks but one that requires an enormous amount of persuasion. When you establish an MPA, the pay back is significant. We have examples in the Mediterranean, where MPAs were set up to protect corals, for example, and as a result the same thing happens as always does, the local fisheries benefited. Yet, I find it extraordinary that you go into fishing community after fishing community and they view this idea with great suspicion.

Marine reserves in the EU have been shown to deliver, on average, an increase of 251% in biomass, a 121% increase in density of animals and plants, a 13% increase in body size and a 19% increase in the number of species per unit area. For example, cod productivity in the Sound just outside Copenhagen, where a trawling ban has been enforced since the 1930s, is estimated to be about 100 times higher than in neighbouring Kattegat. In Kattegat with no historic trawling ban the cod population has been in a steady decline to the point where it is now considered commercially extinct. The benefit for the fishing community is obvious – they can still catch cod in the Sound.

# What involvement is needed from the local communities concerned?

Local communities should be given the opportunity to participate in the designation of MPAs, through planning, implementation, and in their management and control. Europe has hugely different marine resources, from the Black Sea to the Mediterranean and all the way up to the Artic, and the way in which traditional knowledge is handled is very important. I think the future of fisheries needs to reflect this and nowhere better than through local community action.

I saw it working extremely well in Canada, particularly in relation to the herring fisheries, which have withstood enormous pressures. The thing that has kept the Gulf of Maine fisheries going, for example, was this huge sense of community and the exchange of knowledge and information with scientists; really talking together all the time about what was happening and how best to respond. This sense of community and the willingness for all interests to work together is what is going to be needed in the future. The idea that we are going to take the last fish out of the water is very short sighted; there are far bigger stories that the fishing industry can and must tell.

#### In the context of restructuring in the fisheries sector, can fisheries areas benefit from the emerging "green economy" and if so, what kinds of activities do you think present the greatest potential?

To benefit from the potential offered by the green economy, the fisheries sector must firstly fish sustainably, and comply with the rules that have been designated to support the green economy. Fisheries policy must also support this transition. The fishing industry continues to be heavily subsidised and I t hink there should be more tags or conditions attached to these subsidies. Discard and other unsustainable practices need to be addressed and we also need to encourage more MPAs.

In relation to MPA, I think there is potential for fishermen to take on the role of enforcement. You have a competent skilled workforce, a substantial fleet and this is one of the options that still remains; that you take care of the resource through those who are best placed to do it. The green economy is also a catalyst for innovation and the development of new business and employment opportunities. In maritime areas, for example, we see an increasing number of off-shore wind farms. The fishing fleet could easily be the ones who go out to maintain these assets. It's not necessarily that you stop a fisherman from being a fisherman. They can do multiple things at sea. Creating this kind of working blue economy is clearly a v ery important part of the green economy.

# Do you see a role for fisheries communities in addressing major environmental challenges, such as climate change, and how might this work in practice?

Climate change is another very good reason why fishermen need to take a more proactive role in looking after the marine resource and not just take it for granted. With the tropicalisation of the Mediterranean, for example, we see some very aggressive fish species coming in that could easily wipe out some of the more traditional species.

Ocean stewardship is the term I like to use for this and I think we really need to promote and develop this. This is why I feel very strongly about the idea of attaching conditions to subsidies. Similarly in relation to fishing licenses, which I believe should only be granted to operators who are committed to protecting the health of the marine ecosystem.

# What key competences do fisheries communities need to grasp these opportunities?

I meet a lot of fishermen and they are incredibly knowledgeable. They can also be very stubborn of course, and they don't always want to listen to scientists or academics, and I don't blame them sometimes. But academics and fisheries managers can have some really good ideas, particularly about marine protected areas, so there is a genuine need to help these two sides of the community to reach out to each other and have a k ind of a "nature park" thinking.

We also have to remember that it's not just the fishing fleet that get to extract value from our seas and oceans, it's actually the local community itself. So the stakeholder process, be it through Fisheries Local Action Groups, or maybe they should really be called Maritime or Coastal Local Action Groups, could really help to build these links between the different interests involved.

## Are there EEA activities or tools that you think could be useful for fisheries communities that are looking at opportunities in the environmental sector?

Where I think we can help most is through a new approach to consumers and citizens being implemented through our new "Eye on earth" initiative (www.eyeonearth.org). This is a way of getting quality assured information into the hands of local communities and individuals. Within this we've got an initiative called "WaterWatch", which looks at bathing water stations, and we're also going to have "NatureWatch", which could be used by fishermen to look at species that are coming in. We could also add things like, what kind of fish is available locally, and encourage chefs and those in local communities to build up their profile, based on quality assured environmental information.

These are not trivial things, and I think it's really important that as people's awareness around food increases, we need to be there with the right information inputs at the right time. Fishing communities must respond to this and look at how they can communicate in a much more modern way.

Interview conducted (in English) on 16 March 2012. Report

# HUELVA [SPAIN]: WHEN RETRAINING FISHERMEN TAKES AN ENVIRONMENTAL TWIST

# Exploring new paths

On the western coast of the province of Huelva in Andalusia, Axis 4 of the European Fisheries Fund (EFF) is investing in environmental projects that combine environmental restoration with the professional redeployment of fishermen who have lost their livelihood due to the decline in fish stocks.



"Can you see over there on the bank? It's one of the only three ospreys<sup>9</sup> in the whole of Andalusia, one of the last remaining specimens in Spain." From the bridge of his boat, Ignacio Gonzalez, an athletic man, now in his fifties, makes sure that his passengers are kept informed of anything noteworthy when sailing in the lagoons of the Marismas marshland nature reserve, off the island of Isla Cristina. Breaches of planning regulations is another noteworthy topic: "Take the peninsula over there: there was no planning permission, yet look at all those buildings..." Ignacio was a fishing boat skipper for thirty years, but made good use of his master's certificate to retrain and set up a business in the tourism industry. "I stopped fishing because there were no fish... But I thought that there were other resources here that we were not exploiting sufficiently, be it as visitors or sailors." For the last four years, he has been organising excursions on the sea, focusing on the exploration of the environment and fishing heritage. Two options are offered to visitors: in the morning, trips in

▲ Feeding time at the Salinas del Astur fish farm.

the open sea (50 euros per adult, including a meal); in the evening, one-hour sea trips (9 euros per person). "Sometimes I organise tailor-made trips elsewhere on the coast, but this is rare and often less interesting." These boat trips are his only business activity.

<sup>&</sup>lt;sup>9</sup> In fact, the osprey (*Pandion haliaetus*) is a bird of prey that lives on fish and is extremely skilled at diving for its food.



Ignacio Gonzalez at the helm of his boat.

The contacts he has established with several major hotels ensure he is fully booked every day from July to September, but Ignacio believes that he could expand by extending the season, increasing his profit margins a bit, and creating a job for his son by acquiring a vessel for two crew members and twelve passengers instead of the current eight. To do this, Huelva's local fisheries action group (FLAG) has just approved an Axis 4 grant of 41 605 euros, or 60% of the cost of the investment required.

Home to the second-largest fishing fleet in Spain (258 boats), Isla Cristina is also one of the many resorts on the *Costa de la Luz* ("Coast of Light"), the Atlantic section of the Andalusian coast. A popular destination for Spanish holidaymakers since the sixties, the region is now attracting more and more foreign visitors. This led to a property boom in the early 2000s, which further intensified urban development along the coast, threatening the many wetlands and parasol pine forests that are characteristic of the region.

"This is why we made environmental management an essential component of our strategy," says José María Martín, director of the FLAG in Huelva. "The environment has a d ual character: we must protect it, even restore it, and it is also a very important source of jobs, especially for fishermen."



▲ Jose Maria Garcia in front of the FLAG's office with his electric bicycle.

# Electric bicycles

Having been unemployed for several months, José Maria Garcia and five other partners, three of whom were also unemployed, came up with an innovative idea for a t ourism business for which they applied for an Axis 4 grant of 40 000 euros.

"Leisure here has always been concentrated on the beach," laments Jose Maria Garcia. "However, the territory has a lot of other thinas to offer, such as the wonderful natural environment: 80% of the territory of the local authority of Isla Cristina is protected. Fishing is also a whole new exciting world to discover. On top of this, the construction of hotels has also been accompanied by the creation of walking trails and cycle paths. Our idea was to capitalise on these two assets – the environment and this new infrastructure – to develop a new business. But our project is also part of a territorial approach: we are not just looking for commercial gain; we don't want visitors to leave with the wrong idea about our region. We want to show them how the local people really live, in harmony with their environment."

Beyond this principle, the innovative character of the project lies both in the type of equipment envisaged – e lectric bikes – and in the cultural quality of the product. The company will offer two types of cycle tour on routes of about ten kilometres, at a price of 30 euros per half-day: a selfguided formula, where cyclists consult a brochure in four languages, indicating the natural and cultural attractions and the services available on the three thematic routes that the project promoters have developed ("Fishing", "Dunes and Woods," "Marshland Nature Reserve"); and a package for groups of at least five people, guided by an instructor, which in the case of the "Fishing" tour, would be a fisherman.

"We opted for electric bicycles because the tourists we get here are often not that fit or are older. We aim to buy 60 high-quality, comfortable, sturdy "trail" bikes, with a battery giving a 70 km range that recharges in 5 hours. These bikes will be custom-built for us, to the very precise specifications that we have defined. They will be assembled here with parts from all over the world. This type of bike costs about 1000 euros. A number of bicycles will be available in the six large hotels and three campsites with which we have established contacts, but the majority will be based in our rental agency." Estimated cost: approximately 106000 euros, with one permanent and three seasonal jobs.





▲ Fishermen participating in the course, "Improving access to natural environments", in Ayamonte.



Mixing fish waste, breadcrumbs and sunflower oil to make high quality fishmeal.

## Employability

The Huelva fisheries area currently has 2500 fishermen, compared to 4000 less than twenty years ago. And this trend is accelerating as fish stocks dwindle. In addition to supporting entrepreneurs such as Ignacio Gonzalez or Jose Maria Garcia, the Huelva FLAG has put the emphasis on retraining and redeployment of fishermen who are unemployed or threatened with losing their livelihood, in the environmental sector. Axis 4 has sponsored three training courses in the three fishing ports in the area: Punta Umbria, Isla Cristina and Ayamonte. The courses run for six months, eight hours a day, five days a week. 325 people, including many women, are participating. The courses in Punta Umbria and Isla Cristina ended in October but the one in Ayamonte, a town on the Portuguese border, continues until March 2012.

"Fishing here is mainly for clams but stocks are almost exhausted and a number of the 1500 local fishermen are unemployed," explains Dolores Giner, programme coordinator at the Municipal Training Centre of Ayamonte. "With Axis 4, we have developed four programmes with six to nine modules each, all connected with the environment and selected according to demands and opportunities: 'Restoration of the landscape and gardening', 'Maintenance of the forest and landscape', 'Improving access to natural environments', and 'Coastal clean-up'. Each course has 25 participants, allocated as far as possible according to their preferences."

Each topic consists of 110 hours of theory courses, but the emphasis is on practice, with a focus on risk prevention, the use of computers, job search or self-employment. In Ayamonte, nearly 400 people applied and 100 were selected. Prerequisites, in order of priority: being unemployed and either a fisherman, a fisherman's wife or a family member of a fisherman. A p oints system then took account of income level, the number of children, the length of time out of work, and the length of time spent as a fisherman.

"Compared to other courses that we organise, the budget is fantastic: almost 800000 euros. We have very good equipment," says Dolores Giner. Manuel Rodriguez, one of four trainers, agrees but adds: "Let's be clear, it's not always easy to work with the participants. Their educational level is often not very high, they are no longer used to 'going to school', they do not always have the discipline to study, and then, like all fishermen, they are individualists and find it hard to accept that there is no longer enough fish. For the same reasons, they are admirable because it is not easy to change career when you are thirty, forty or fifty years of age."

# New market outlet for unsold catch

But there is a project that, all on its own, epitomises the momentum behind Axis 4 on the coast of Huelva province. Ten years ago, opposite the city of Huelva, the municipality of Punta Umbria set up the Sociedad Municipal Salinas del Astur, reopening a fish farm situated in a nature park with the aim of creating jobs for unemployed fishermen. The business, which has three tanks and employs six full-time equivalents, produces 15 tonnes of sea bream, bass, sole and meagre every year. Pending the opening of a shop and a website planned for March 2012, nearly all the production is sold to wholesalers and to a few local restaurant owners. "Once it is strong and profitable, the company will be transferred to the 'cofradía' (Association) of fishermen of Punta Umbria," says the manager Rafael Rodriguez, a biologist by training who was given the task of making the business viable. "The fact of being in a protected area requires us to comply with a whole host of environmental rules. Hence the idea of using 100% natural wet fish feed for our fish, which comes from the fishermen's unsold catch."

Research conducted with the University of Huelva from 2008 led Rafael and his team to develop a sort of porridge made of fish meal, breadcrumbs and sunflower oil. *"To my knowledge, we are the only ones to do this in Europe. In fact, it's very simple, much like organic farming: we are going back to basics... "They* had to increase production to a c ommercial scale and Axis 4 c ofinanced the purchase of the equipment (grinder, blender, fan, work surface, etc.), providing 14000 of the 32000 euros needed.

The fishmeal is made from the share of the catch of thirty boats, which is not sold at the Punta Umbria auction mostly for quality reasons. They provide 500 kg of raw material every day, five days a week. "Previously, the fishermen had to pay to incinerate the unwanted catches. Now they are happy because they can get rid of it for free." Rafael continues: "Our fishmeal tastes better than the industrial pellets. Our fish love it. The proof is that they eat it all year round, in all seasons, whereas they do not eat industrial pellets in winter. So o ur fish grow faster and taste better. We are more productive and competitive. We will soon start producing our fishmeal with only ground fish, freezing it to give it more substance. For now, the product is more expensive because we have to buy the bread and the oil, write off the equipment and pay an employee, but the fish is better and fetches a higher price. The raw material is not taxed, which is another advantage. It hink that within three months, we should reach our target of 50 cents a kilo, compared with 90 cents for industrial pellets."

The home-made fish meal provides half of the feed that the fish farm needs. The volumes of unwanted fish that the fishermen are able to provide can vary a l ot, the industrial pellets are therefore still needed. Hence the next step will be to obtain supplies of wasted fish from the Isla Cristina fish auction.

In the longer term, the company also wants to develop the site, which already has some bird observatories. It would involve setting up a sort of "park" with a restaurant and interpretation centre. "But that plan is of a different order of magnitude," says Rafael Rodriguez, "because we are talking about an investment of at least one million euros..."



The Salinas del Astur fish farm is situated in a nature park.

"Throughout the territory, there is no shortage of ideas, just the funding," says the FLAG manager, José María Martín. "Banks are not lending any more, even mortgages. With the crisis, Axis 4 is often one of the only ways for local entrepreneurs to finance their activities. But, more generally and importantly, our FLAG has become the main source of support for projects integrating maritime activities and sustainable development on the Costa de la Luz."



gdphuelva@asopescaluz.com gdphuelva@hotmail.com

# Trade winds

#### SPAIN

#### FAROS: no discards, zero waste

Total cost: EUR 2 182 906 – EU contribution (I IFE-Environment): 1 063 357

"FAROS ('lighthouses' in Spanish) aims to address the negative environmental impacts of fishing activities by helping fleets to minimize by-catch and discards, and to exploit this raw material in the food and pharmaceutical industries. The project should lead



to an integrated management network which will allow fleets to provide real-time information to customers on the availability of by-catch at a nearby port. They will, therefore, be able to prepare all the logistics in advance, before the arrival of the boats. A GIS mapping model tracking selected fleets (considering species distribution) will be developed, allowing fishermen to avoid areas or periods with an abundance of unwanted by-catch and to select the most profitable, ecological and lowest fuel consuming catch, thus contributing to the goals of EU policies on environmental protection."

Antonio Alvarez Alonso, Project Coordinator antonio@iim.csic.es – www.farosproject.eu/

#### FRANCE

#### An organic fish farm in the open sea

Total cost: n.a. - EU contribution: n.a.

"Our organic fish farm, situated out in the open sea, was founded in 1988 by my father, a pioneer of underwater diving and a committed ecologist. Currently, we produce around 700 tonnes of fish (sea bream, sea bass, drum) and employ 50 people. For us, the business is



much more than just a commercial activity, it is also about helping to conserve the natural environment, to ensure that the resources and the capacity of the ecosystem are not over-exploited. In many ways, our company can be seen as an example of private eco-entrepreneurship. To transform constraints into opportunities, a decision was taken to become one of the first organic aquaculture farms in France, where fish are reared in compliance with the standards laid down by three different eco-labels. The fish farm has even, indirectly, had a positive impact on local biodiversity as a result of its natural "reef effect", as fishermen and holidaymakers are prohibited from entering the defined security perimeter. In just 20 years, the biodiversity around the enclosure has increased from 15 species of wild fish to more than 60, much to the delight of local, small-scale fishermen."

Sylvie Charvoz, External relations, Cannes Aquaculture contact@cannesaquaculture.com – www.cannesaquaculture.com/

#### **UNITED KINGDOM / FRANCE / BEI GIUM**

# GIFS: Geography of inshore fishing and sustainability

Total cost: EUR 4600000 - EU contribution (INTERREG Iv): EUR 2300153

"Researchers at the University of Greenwich are leading a project to explore the social and cultural impacts of marine fishing for fishing communities on both sides of the English Channel and the southern North Sea. Focusing on towns



and villages with traditional, small-scale fishing fleets, the university has joined forces with research colleagues in France and Flanders to look at how local, inshore fishing contributes to the identity of places and their communities, and to investigate new, sustainable opportunities to boost regeneration and economic growth. Associating coastal zone governance and marine fishing, the project will develop a 'State of the Coast' toolkit, providing methods for capturing the broad value of fishing (in social, cultural and economic terms), and will document the importance of fishing for sustainable coastal communities."

Suzanne Louail, GIFS Project Manager, University of Greenwich s.louail@gre.ac.uk

#### DK, DE, ES, EE, FR, IT, MT, NI , NO, SE, UK

# GAP: bringing fishermen, scientists and policy makers together

Total cost: EUR 7 600 000 - EU contribution (FP7 Capacities): EUR 5 916 775

"The GAP project aims to bring together fishermen and researchers from across the continent to help inform and shape policy. We want to facilitate meaningful engagement with stakeholders, so that together, we c an develop solutions for sustainable fish-



eries and fishing communities. GAP2 started in April 2011, and is building on the success of GAP1 (an 18 month project that ended in 2009), which supported 15 fishermen-science partnerships from across 11 different European countries. Projects included studies on the behaviour and migrations of brown crab stocks in the UK, mapping Baltic fisheries in support of marine spatial planning in Estonia, identifying Adriatic fish habitats in Italy, developing selective fisheries for whitefish in Sweden, and working with industry to increase knowledge of discards in the Dutch flatfish fisheries. GAP2 is now using these partnerships to advance the case for collaboration between industry, science and governments on the complex, cross-cutting issue of fisheries."

#### Steve Mackinson, GAP2 Coordinator

rshute@seaweb.org - www.gap2.eu/



The harbour of Muros in Galicia (Spain).

# Sustainability at the core of the new European Maritime and Fisheries Fund

With negotiations on the European Commission's proposals for the new European Maritime and Fisheries Fund (EMFF) expected to continue throughout 2012, the time to begin planning the programmes for the 2014-2020 period is now! This article examines what is being proposed for the new EMFF, with a particular focus on the implications for the environment and the sustainable development of fisheries areas.

In December 2011, the European Commission published its proposed regulation for the new EMFF. Like all other EU funds, the EMFF has been explicitly designed to make a s ignificant contribution to the Europe 2020 strategy. In order to achieve this, the Commission has prepared the Common Provision Regulation<sup>10</sup> which provides a framework for the coordinated delivery of five key European funds (EMFF, EAFRD, ERDF, ESF and CF). This framework contains eleven thematic objectives which are common to all the Funds. The EMFF should in particular have a s ignificant impact on four of these objectives. Two refer principally to the environment: protecting the environment and promoting resource efficiency; and supporting the shift towards a l ow carbon economy. A third has an economic focus – enhancing the competitiveness of small and medium sized enterprises in the fisheries and aquaculture sectors, while the fourth objective is to promote employment and support labour mobility. In addition, however, the EMFF has the goal of supporting the implementation of the reformed Common Fisheries Policies (CFP). The reform proposal explicitly argues that environmental sustainability is a precondition for the economic sustainability of the fisheries sector, and the social sustainability of fisheries communities. It proposes that fish stocks must be exploited at Maximum Sustainable Yield by 2015, which it suggests would increase stock sizes by 70%, overall catches by 17%, while profit margins could be multiplied by a factor of three and return on investment would be six times higher...<sup>11</sup>

<sup>&</sup>lt;sup>10</sup> COM(2011) 615 final (http://ec.europa.eu/ regional\_policy/sources/docoffic/official/regulation/pdf/2014/proposals/regulation/general/ general\_proposal\_en.pdf)

COM (2011) 417 final (http://eur-lex.europa.eu/ LexUriServ/LexUriServ.do?uri=COM:2011:0417:FIN: EN:PDF)



In order to achieve such a transition, the CFP proposes a number of changes – the elimination of discards, the introduction of transferrable fishing concessions for large-scale vessels to reduce capacity, the strengthening of multiannual management plans, improved science-industry partnerships, better governance through regionalisation, and improved social dialogue to improve working conditions.

The last few months have seen intense discussions on the reform of the CFP. However, whatever the final outcome, to fully understand the current proposals for the EMFF, they must be considered within the context of the changes proposed by the CFP.

The basic architecture of the new fund is quite simple. It will be composed of four pillars jointly managed by the European Commission and the Member States, dealing respectively with the sustainable development of fisheries, aquaculture and fisheries areas, and a series of accompanying measures to the CFP such as data collection, control and market measures. Further measures to promote integrated maritime policy are managed directly by the Commission.

# What goes out and what comes in?

Some important measures in the old EFF have been discontinued while some new ones have been introduced.

Overcapacity remains the major problem of the CFP and is one of the key drivers of overfishing. The removal of overcapacity through public aid such as scrapping has proven ineffective; despite €1.7 billion spent since 1994, actual fishing capacity has not decreased in most of EU fleets. The EMFF will therefore no longer support scrapping and deploy the financial resources thus saved towards more effective forms of assistance to sustainable fishing.

The withdrawal of these subsidies will clearly have a negative economic impact on the sector in the short term. So, in order to support the transition, the proposed EMFF will include support for a series of measures designed to promote innovation and increase the value added retained by fisherman from every wild or farmed fish sold. These include advisory services, partnerships between scientists and fisherman, promoting human capital, facilitating diversification and job creation, investments in health and safety on board, investments in product

▲ Shrimp fishing off the coast of Ostend (Belgium).

quality and the use of unwanted catches, support for systems of transferrable fishing concessions, and improvements to fishing ports and landing sites to deal with discards and health and safety. Priority will be given to collective approaches and small scale coastal fleets, which will receive a higher aid intensity than other types of beneficiaries.

There are also a series of specific measures targeted at limiting the impact of fishing and aquaculture on the environment and to help fishermen to participate in conservation measures. These include investment in eco-innovation to such as more selective fishing gear and methods; the management, restoration and monitoring of NATURA 2000 sites and other protected areas; and measures to promote energy efficiency. Support is also available for aquaculture with a high level of environmental protection and providing environmental services.

Finally, the proposed EMFF will reinforce the social dimension of sustainability through support for training and lifelong learning, diversification and job creation in other maritime sectors, as well as measures for fishermen's wives such as training linked to entrepreneurship and business management. Once again, collective approaches and the small-scale coastal fleet are regarded as a priority, and this is where bottom up approaches for the sustainable development of fisheries areas can be particularly important.

## From Axis 4 to FARNET

Axis 4 for the sustainable development of fisheries areas in the existing EFF is addressed in Chapter 3 of the new EMFF and there are a nu mber of important changes in the FARNET approach that FLAGs and managing authorities should be aware of.

Firstly, the EMFF will now follow the same community-led local development approach as the EAFRD, ERDF and ESF – as set out in the common provisions for these funds<sup>12</sup>. FLAGs and managing authorities need to start thinking about how they could best use this opportunity in the future. For example, some large FLAGs may want to complement their EMFF allocation and seek funding from the ERDF, ESF or EAFRD. On the other hand, smaller fisheries local action groups (FLAGs) may integrate more closely with Leader groups or other partnerships. The challenge will be to ensure that the benefits of greater synergy with other funds are not outweighed by a dilution of the specific goals of the EMFF in terms of supporting fisheries areas.

The EMFF has two specific goals which justify its support for community-led local development in fisheries areas. The first is to maximise the participation of the fisheries and aquaculture sectors in the sustainable development of their areas; and the second is to ensure that local communities (in general) benefit from the opportunities offered by maritime and coastal development. These two goals mean that strategies can range from "those which focus on fisheries" to "broader strategies directed at the diversification of fisheries areas". The idea is that interventions in the fisheries sector should maximise links with and benefits for the local community generally. At the same time, interventions in other sectors should also bring benefits for the fishing community.



 Capitalising on local fishing heritage in the Netherlands.

The composition of FLAGs should "broadly reflect the main focus of their strategy", as well as taking account of the socio-economic composition of the area. In all cases, there should be a "significant representation of the fisheries and aquaculture sectors". This is likely to be more important when the strategy focuses on fisheries activities.

#### <sup>12</sup> Articles 28-31 of the Common Provision Regulation

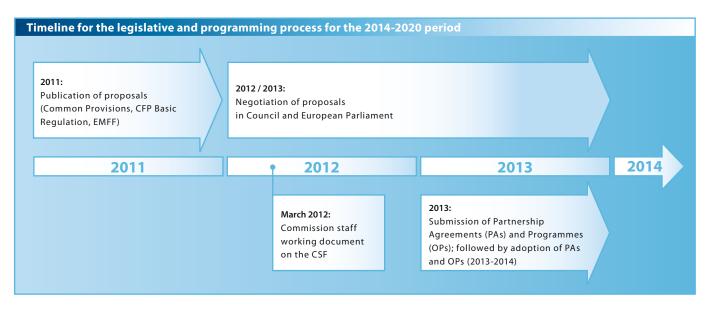
# EU funding terms explained

The Common Strategic Framework (CSF) is the mechanism to coordinate the operation of five EU funds (European Regional Development Fund (ERDF), European Social Fund (ESF), European Agricultural Fund for Rural Development (EAFRD), European Maritime and Fisheries Fund (EMFF) and the Cohesion Fund), whose management is shared between the Member States and the European Commission, in order to achieve synergy and simplification, thus maximising the contribution of these Funds (now referred to as "the CSF Funds") to the objectives of the Europe 2020 strategy for smart, sustainable and inclusive growth. It will also ensure a better coordination with other EU policies and funds (such as the new research programme (Horizon 2020) and Life+ for the environment). The Commission staff working document "Elements for a Common Strategic Framework 2014-2020" was adopted on 14 March. The Commission welcomes comments from stakeholders. See http://ec.europa.eu/fisheries/ news\_and\_events/press\_releases/2012/20120322/index\_en.htm **The Common Provisions Regulation** contains a set of common rules for the "CSF" funds. The aim is to foster better linkages with the Europe 2020 strategy, to focus more on results, to ensure greater coordination and complementarity between these Funds and harmonise their implementation rules and control requirements.

**Partnership Agreements** are concluded between the European Commission and each Member State and describe how the funds will be used to achieve EU objectives, how they are to be coordinated and how they will complement each other at the national and regional levels.

**Community-led local Development (CIID)** is a sp ecific method of local development, based on the experience of Leader and Axis 4 of the EFF, whereby local communities (through a multi-sectoral partnership) develop and implement an integrated strategy. From 2014, Member States will be able to apply CLLD in rural, urban and fisheries areas using one or a combination of the following four funds: ERDF, ESF, EAFRD and EMFF.





However, FLAGs and MAs should note that the Common Provisions for all funds specifically state that "no single interest group shall represent more than 49% of the voting rights". So fisheries representatives may be the driving force and lead partners but there must be a genuine negotiation within the partnership.

The boundaries of fisheries areas should also be "functionally coherent, taking specific account of the fisheries and aquaculture sectors". As fishing activities are often scattered along a coastline, estuary, lake or river, this can mean that functionally coherent fisheries areas cross over the boundaries of other local areas. More specific guidelines for the minimum and maximum size of areas will be made available soon by the European Commission. The EMFF takes a more flexible approach to eligibility by laying down the broad objectives of support, rather than trying to define a closed list of eligible measures. Objectives include: adding value at all stages of the fishing supply chain, supporting diversification, capitalising on local environmental assets, promoting social wellbeing and cultural heritage, and strengthening fisheries governance. As is currently the case, it will also be possible to use local strategies to support measures in the other chapters of the EMFF, as long as there is a clear rationale for their management at local level. In fact, there are a number of measures in chapter 1 for sustainable fisheries, and in chapter 2 for sustainable aquaculture, which could be effectively implemented at local level in certain contexts.

Support for cooperation is also streamlined, with Member States required to either leave project selection to the FLAG or to establish a system of on-going applications for cooperation projects. Approval has to take place no later than four months after submission. Cooperation is also extended to countries outside the EU and national networks will be supported financially.

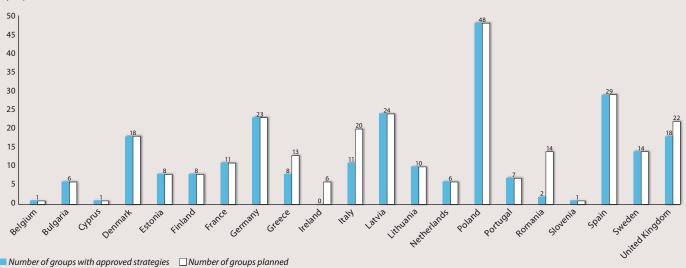
Finally, according to the Common Provisions, the budget for running costs and animation will in future have an upper limit of 25%, compared to 10% in the current period. Up t o half of this can be advanced to the groups.

#### Keep up to date on the reform of the Common Fisheries Policy:

http://ec.europa.eu/fisheries/reform/ index\_en.htm

#### > More than two hundred and fifty FLAGs with approved strategies

By April 2012, a total of 254 FLAGs were active in 20 Member States.



Number of groups with approved strategies Number of groups planned

#### > FLAGs as drivers of green growth

FARNET's 6th transnational seminar, which takes place in Olhão, Portugal on the 4-6 June 2012, will focus on the topical issue of green growth. The event will look at the role of FLAGs as drivers of green growth in fisheries areas and, in particular, at the opportunities presented by Axis 4. By showcasing projects and approaches, as well as providing opportunities for exchange and networking among FLAGs and other stakeholders, the event aims to provide a platform for fisheries areas to advance their green agendas.

https://webgate.ec.europa.eu/fpfis/cms/farnet/ flags-drivers-green-growth-european-fisheries-areas

#### > FLAG cooperation in the Mediterranean

Eighteen FLAGs from Cyprus, France, Greece and Spain recently signed a "Charter for Mediterranean FLAG Cooperation", which establishes a framework for addressing common issues, through the implementation of joint actions.

Initial actions foreseen include environmental and educational activities, as well as promotional actions for local fisheries products and fisheries-related tourism. However, the scope of the charter remains open to further projects that contribute to the development of Mediterranean fisheries areas.

#### > One stop shop for EU-funded marine research

The online "Marine Knowledge Gate 1.0" has been recently opened. This innovative new tool aims to provide the European maritime community with a one-stop-shop, providing access to a wealth of knowledge generated by marine focused research projects funded by the European Commission. Using advanced functionality and search facilities, the system is intended to enable transparency and accessibility, thereby making it easier for a variety of users to access relevant information. www.kg.eurocean.org/

WHEN	WHAT	WHERE
10 May 2012	Committee of the Regions conference: "Regions and cities for integrated territorial development. A Common Strategic Framework for cohesion policy, rural development and fisheries funds for the period 2014-2020"	Brussels (B)
21-22 May 2012	European Maritime Day 2012	Gothenburg (S)
4-6 June 2012	FARNET seminar: "FLAGs, drivers of green growth"	Olhão (P)
8-11 October 2012	OPEN DAYS – 10th European Week of Regions and Cities. Workshops on Community Led Local Development in fisheries, rural and urban areas	Brussels (B)
13-15 November 2012	FARNET seminar: "Organising fisheries areas for a sustainable future"	Pays d'Auray (F)

# Profile

NAME: Axis 4 of the European Fisheries Fund (EFF)

**OBJECTIVE:** The EFF may co-finance local projects for sustainable development and improvement of the quality of life in fisheries areas, complementary to other EU financial instruments.

**IMPI EMENTATION:** Twenty-one Member States implement Axis 4. An important innovation in the implementation of this axis is the emphasis on the territorial approach.

**TARGET AREAS:** "Fisheries areas" are areas with a sea or lake shore or including ponds or a river estuary and with a significant level of employment in the fisheries sector. The Member States select the eligible areas according to the following criteria: they should be small local territories (less than NUTS 3) that are coherent from a geographical, economic and social point of view. Support should be targeted either to sparsely populated areas or those where the sector is in decline or those with small fisheries communities. Member States can add further criteria for the selection of the areas.

**RECIPIENTS: "Fisheries I ocal Action Groups (FI AGs)"**, i.e. a combination of public, private and civil society partners jointly devising a strategy and innovative measures for the sustainable development of a fisheries area. FLAGs are selected by the Member States on the basis of criteria defined in their operational programmes. It is expected that at least 200 FLAGs will be created across the EU.

**El IGIBI E MEASURES:** Strengthening the competitiveness of the fisheries areas; restructuring, redirecting and diversifying economic activities; adding value to fisheries products; small fisheries and tourism infrastructure and services; protecting the environment; restoring production damaged by disasters; inter-regional and trans-national cooperation of actors; capacity building to prepare local development strategies; and the running costs of FLAGs.

**NETWORK:** All the stakeholders concerned with Axis 4 are organised around a "**European Fisheries Areas Network (FARNET)**", permitting wide dissemination (through seminars, meetings and publications) of innovative projects implemented for the benefit of fisheries areas and fostering transnational cooperation. The network is coordinated by the "**FARNET Support Unit**".

**DURATION OF THE PROGRAMME:** seven years (2007-2013), but projects can be implemented until the end of 2015.

**EUROPEAN UNION ASSISTANCE:** Priority Axis 4 has a budget of EUR 567 million of EFF funding for the period 2007-2013, to which must be added national public co-funding and private investment. It represents approximately 13% of the overall EFF budget (2010).

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#### Send us your news

FARNET publications are resources for all those engaged in building a more sustainable future for Europe's fisheries areas. Please send us news and information on your activities which might be of interest to other groups or actors working in this field. In particular, we would like to hear about your successes and achievements, important events and announcements, and also your ideas or proposals for exchanges or cooperation with other fisheries areas.

info@farnet.eu







