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REPORT OF THE MEDITERRANEAN REGIONAL FORUM

APRIL 10TH 2013

ATTENDEES

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- ARCELLA Laurent, shellfish farmer, CRCM
- CALLIER Myriam, IFREMER, Aquamed Project
- D'ARTIGUES Agnès, *Syndicat mixte du bassin de Thau*
- DESLOUS-PAOLI Jean-Marc, director of CEPALMAR (*Centre d'Etude et de PRomotion des Activités Lagunaires et MARitimes en Languedoc-Roussillon*)
- FABAS Isabelle, leader of the FLAG « Thau et son Lido », ADMM (*Association Pour le Développement des Métiers Maritimes*)
- FARENG Claudette, Director of the ARDAM (*Association de Ressources et de Développement des Activités et Métiers de l'environnement*)
- FARENQ Raymond, *Conseil Général de l'Hérault*
- GRIMAUULT Claude, DDTM (*Direction Départementale des Territoires et de la Mer*)
- LOBBEDEVY Stéphane, *Conseil Général de l'Hérault*
- MAILHEAU Marie, project manager, *Syndicat mixte Rivage Salses-Leucate*
- MARZO Daniel, shellfish farmer
- MOLLO Pierre, *L'Observatoire du Plancton*
- NAVARRE Alexandre, shellfish farmer
- ORTIN Philippe, shellfish farmer, President of the CRCM
- PEREZ Clément, DDPP (*Direction Départementale de la Protection des Populations*) de l'Hérault
- PROU Jean, IFREMER, partner of Euroshell
- REGLER Denis, Director of the CRCM
- ROQUE Emmanuelle, IFREMER
- ROUCAIROL Rémy, shellfish farmer, *Syndicat conchylicole Marseillan*
- ROUMEAU Stéphane, *Syndicat mixte du bassin de Thau*
- SCOTTI Paul, shellfish farmer, COOPAPORT (*Coopérative aquacole de Port Saint Louis du Rhône*)

- SPOSITO Gérard, *Université de Montpellier 2-CREUFOP-SMEL (Station Méditerranéenne de l'Environnement Littoral)*
- THIBAUT, Jean-Jacques, shellfish farmer
- TUDESQ Michel, *Lycée de la Mer de Sète*
- VARRAUD Emilie, Director of the CPIE (*Centre Permanent d'Initiatives pour l'Environnement*) Bassin de Thau
- VIDAL Eric, *Conseil Général de l'Hérault*
- VINZANT Michel, CEPRALMAR
- WAWRYNOW Karine, *Communauté d'Agglomération du Bassin de Thau*

WELCOME AND INTRODUCTION

Mariella Eripret thanked all participants for having accepted the invitation to the third regional forum of the European project Euroshell.

She presented the project and the objectives of the day (see annex 1).

Euroshell aims to identify current and future challenges that the European shellfish sector is facing and to create the conditions for improving knowledge transfer between science and industry and for a better integration of industry needs into research.

The project focuses on identifying the underlying factors that hinder the effective management of knowledge in the sector and organizes regional forums to facilitate dialogue between companies and researchers, focusing on the development of an effective methodology for knowledge transfer.

Euroshell will lay the basis for an extension network and it will define a common vision for the future of the European mollusk sector and identify key targets for research that could be integrated into the European Aquaculture Platform for Technology and Innovation (EATIP). It will also provide opportunities for cooperation with Fishery Local Action Groups (FLAGs - Axis 4 of the European Fisheries Fund) of the European fishing areas network (FARNET).

The participants were then invited to present themselves, by profile, telling their name, their experience, where they work, what they produce or work on, etc.: farmers first, then scientists, extension workers and finally officials.

WORKSHOP 1 – VISION OF THE SHELLFISH SECTOR

As an introduction to the workshop, the European Aquaculture Technology and Innovation Platform (EATIP) was presented (See presentation in Annex 2).

Technology platforms, implemented in 2000 at the initiative of the European Commission, aim to bring together public and private actors (producers, scientists, elected officials, local

authorities, other experts...) of a sector with high technology potential to define a long-term vision on the needs in terms of research. This allows the European Commission to focus its tenders in accordance with the actual needs of different technology sectors. There are about 40 platforms in all areas (energy, transport, food, etc.).

For the aquaculture sector, the EATIP was created in 2007. Last year and following regional consultations across Europe (supported by the AQUAINNOVA initiative), a Vision document and Strategic Research and Innovation Agenda was finalized. But this document mainly addresses the fin-fish sector, and shellfish issues are less well represented. Given that the Commission is very interested in future research needs for aquaculture, it is essential that the shellfish sector is better integrated into the vision.

Euroshell is an opportunity for shellfish farming to take a better place in this platform. It is in this context that an exercise on the vision of the sector was proposed to the participants of the forum.

The goal was to define a common vision for the sector and to identify priorities for research. Participants were asked to comment on the scheme of the vision of the shellfish sector, proposed by EMPA with some additions from the vision of EATIP and from the previous workshop in Poitou-Charentes (see schema in Annex 3): They were asked the following questions: Do you agree with this view? Are there elements to add? Are there some to remove? Can you clarify these ideas with examples? What are the most important elements?

This document was sent to participants a few days before the date of the forum, so that they could start to think about it.

Participants were divided into four mixed groups of seven to eight persons, to facilitate speaking. Each group consisted of 2-3 producers, 1-2 scientists, 1-2 extension workers and 2-3 officials.

After an hour of discussion, a reporter from each group presented a summary of the discussion of his group in plenary session. These are the principal outcomes:

- Establishing a common vision for the sector is essential in order to guide research efforts in the direction of a sustainable development of the sector. Unfortunately, shellfish stakeholders do not project themselves much into the future. One of the strengths of the sector is the large number of small businesses but is also a weakness because it is more difficult for a small company to plan the future.
- Overall, the vision is not pessimistic. There is indeed a resurgence of installations, which means that producers believe in the future of this profession. But some stakeholders (including governments) do not believe much in it.

I/ Product – production

1. Technologies and innovation

Further research efforts have to be made on:

- The mortality crisis: understand the causes and find solutions to address them;
- Zootechnical / farming practices;
- Diversification of products;
- "offshore" culture: take into account the harsh working conditions, the cost, the profitability, predation, etc.
- Predators / competitors
- The valorization of by-products: empty shells are currently sent to Brittany to make agricultural fertilizers. We need to find local solutions.

In the Mediterranean, there is a crucial need for platforms and technical centers to experiment and innovate with adequate infrastructure (ponds...) that could also provide spat and follow them up.

2. Spat supply

This point is not obvious in the schema but was mentioned by all groups. We must improve the management of natural beds to maintain the practice of natural collection that allows producers on the one hand, to be independent for the supply of spat and on the other hand, to obtain stronger individuals.

In parallel, we must develop hatcheries to diversify the supply.

3. Pathology and shellfish health

It is of course essential to continue research on these aspects, closely related to the safety of consumers.

4. Quality of shellfish, consumption and human health

The assurance of that quality requires traceability and labeling. At the same time it promotes the product. Flows between different production areas or regions can have negative influences on the quality of products.

II/ Environment – territory

1. Water quality

This was of course considered essential by all participants.

Water quality requires proper management of watersheds. Improvements in the *Bassin de Thau* have been made, they are to be pursued by local authorities.

It includes analysis of the chemical quality of water, that means all the general characteristics of the water and concentrations of dissolved minerals in the water.

Studies on the impact of pesticides on phytoplankton should be made.

Monitoring of water quality should be increased. The "*Omega Thau*" project is a tool for environmental management and management of microbiological pollution warning in the *Bassin de Thau*.

Water quality, ecosystem services, adaptation to the environment... all these aspects can be grouped into the same theme: "environmental quality."

2. Protective Measures for the territory

This is to preserve access to the coast, either to maintain existing farms or to establish new ones. There are various legal tools to ensure the sustainability of installations by the classification of land.

- ⇒ The PAEN (Perimeter for the protection and development of agricultural and natural areas) initiated by the government and prepared jointly between the *Département* and municipalities. Once established, the perimeter is frozen and one must appeal to the *Conseil d'Etat* to defeat it.
- ⇒ Schemas for the development of the sea (SMVM)

"Zones for shellfish farming use" could be created to enable maintaining the facilities in the shellfish industry when they are sold, because the danger is great to see these facilities handed over to individuals that are outside the sector and hence for 'other uses'.

In addition to measures to protect the territory, there are environmental protection measures. These measures should be subject to cross-border agreements as damage to the environment does not stop at borders.

3. Sustainable shellfish farming

The shellfish sector must adapt to environmental changes, it must be ecologically sustainable with both social and environmental positive impacts.

4. Relations with the administration

The situation is different depending on the regions. In Languedoc-Roussillon, relations are good while in the Provence-Alpes-Côte d'Azur, relations with the State are non-existent. However, relationships are correct with the Region and the *Département*.

In response to this problem, Claude Grimault explained that this is because there is no dedicated representative, as in Languedoc-Roussillon. He proposed that the whole "*Cultures marines*" service is

supported by the DDTM (Departmental Directorate of Territory and Sea) for the whole of the Mediterranean, but this solution was not approved.

III/ Marché

1. Communication

Communication should be reinforced to showcase shellfish products. Further work has to be made on the image, with a focus on the local identity.

It also requires the establishment of labels, including product identification labels to enhance traceability.

2. Diversification

It occurs at different stages:

⇒ **Diversification of product range**

Some producers do not worry about opportunities to sell their products. They think that there will always be some, that the product will always be sold. We must therefore support the traditional offer. But in parallel, it is important to consider the changes to come.

We must be able to offer new products to consumers and at the same time adapt to their new trends as well as to external markets.

Monocultural practice is a weakness.

⇒ **Diversification of marketing modes / of opportunities**

Promotion on other markets is necessary. To do this, we must conduct market research, we must look into the future.

Producers and shippers should pool their efforts to agree on opportunities, on marketing chains and better organize themselves together.

A farmer considers that direct sales are preferable.

⇒ **Diversification of activity**

Diversification is seen as a complement, an added value to the core business. Usually “pesca-tourism” comes to mind when talking about diversification. But for many, it is another job that requires a lot of investment in time and money. It requires knowing how to speak about the profession, and not everybody can do that.

Others think it is better to have ‘more than one string to their bow’.

IV/ Management and governance

1. Organisation of the profession

The profession must structure itself with a common and clear message that would transmit key ideas to local authorities and institutions and define a strategy to guide research efforts.

We need to find ways for professionals to become more involved in governance.

We have been talking for several years about the establishment of a "shellfish sea" competitive cluster, a technology platform at the scale of the Mediterranean, similar to what is done in other economic sectors, to bring together stakeholders of the coast around projects of development of the area. The CRCM has little capacity to conduct projects alone.

It is important to maintain proximity with producers as the closer you are, the more effective communication is.

The profession needs to work on the image of the sector: dirty banks, ugly infrastructures ... can give a bad image and harm the interests of the sector.

We must strengthen communication in general, not only on the benefits of shellfish farming. And we must be able to transmit knowledge in plain language to different audiences (consumers, schools, general public ...).

2. Support for companies

Companies need support, whether financial or administrative, as do the *Chambres d'Agriculture*.

It is difficult to set up projects without help.

It is proposed to create a "one-stop shop" to help young people to settle. They should also have access to tools of production.

A local initiative platform, entitled "Thau initiative" has just been implemented. It provides zero-interest loans for agriculture.

3. Human capital

Participants consider that emphasis should be placed on work/study training programs.

Moreover, the producers would like to keep their staff longer.

4. Socio-economic data

There is a lack of data on shellfish farms. The DRAF (Regional Directorate for Agriculture and Forests) launched a study. It is important to obtain more data than just those relating to the production, to better understand the sector.

Some participants indicated that one hour and a half of discussion on all these subjects was clearly insufficient since it would take full days of discussion to agree on a common vision.

PRESENTATION OF THE FLAG « THAU ET SON LIDO »

Isabelle Fabas, leader of the FLAG (Fisheries Local Action Group) « Thau et son lido » presented the operation, the objectives and the projects of this group. (see presentation in annex 4, in French)

WORKSHOP 2 – EXTENSION NETWORK

The purpose was introduced by a presentation of the CEPALMAR (*Centre d'Etude et de PRomotion des Activités Lagunaires et MARitimes en Languedoc-Roussillon*) by Michel Vinzant. (see presentation in annex 5, in French).

Participants were then divided into four mixed groups of seven people, as the workshop on the vision but differently constituted to ensure that everyone could talk with each other.

Questions were sent in advance to participants so that they could start thinking about knowledge transfer. The same questions were asked by the facilitators to start the debate. The discussion was free, the questions being a means to open discussion.

- What is knowledge transfer for you?
- What are the structures that you know, that transfer knowledge? Towards the general public? Towards producers?
- What other structures could do that?
- Why is there no extension network in the shellfish area?
- How to create one that works?
- What resources (human, financial, technical ...)? Who, how, where? ...
- What are the needs of producers and researchers in terms of knowledge transfer?
- What would be the benefits? Difficulties?
- If you were to implement this extension network, how would you do?
- Etc.

After 45 minutes of discussion, a reporter from each group presented a summary of the discussion of his group in plenary session. Here is what came out from the discussions.

General observations:

What is knowledge dissemination/knowledge transfer/extension?

“Extension” means the simplification of a message in a common and accessible language to all, connected to reality. For example, producers need to understand why there are closures and what will happen. Scientists’ message must be transmitted to producers and vice versa.

Currently there is little or no extension due to lack of time, resources, prerogatives. Some producers consider they do not need extension. They do their experiments or trials on their own, without any need to know what is happening elsewhere. In fact, there is a need for extension when there is a crisis (e.g. mortality crisis) but when there is no problem, there is no need for knowledge dissemination.

IFREMER has a duty to provide information, or at least, should have it. However, although financed by public funds, it is also partly financed by private funds. It then becomes a service provider and therefore falls in the private sector, where there is no duty to provide information to the public.

Another problem that hinders knowledge transfer is that public funders fund mainly investment projects and barely the functioning of structures because there is no immediate profitability. We have to sell the idea that if we improve communication and relations between the various stakeholders, there will be a return on investment. It requires a strong lobbying at the national level.

Ideas on knowledge transfer:

Who transfers knowledge?

Euroshell project put forward the idea that the FLAGS could play a role of extension officers as a new skill. However, funding is not allocated for operation. FLAGS cannot be directly extension workers. However, the credit line could be oriented towards extension, it could be used to fund extension projects.

Transferring knowledge requires facilitators, perhaps national agents that would transmit the information to the various structures.

There are many structures that already transfer or could transfer knowledge: professional organizations, Regional Shellfish Committee (CRC), producers’ organizations (POs), Cepralmar, *Centres Permanents d’Initiatives pour l’Environnement (CPIE)*, maritime high schools, IFREMER, etc.

There are also tools. So what is missing is the organization. We should consolidate the potential extension structures and agree on who does what and how, improve communication between them and explicitly assign them extension skills.

The Cevalmar is not a technical centre. It does not have infrastructure for doing experiments. This requires a lot of money. But creating a real platform for shellfish experiments is a necessity for the Mediterranean.

Institutes of Research and Development (IRD), which are industrial and commercial public institutions (*EPIC*) do only basic research, not applied research which is sought after by producers.

The *Centres Permanents d'Initiatives pour l'Environnement (CPIE)* transfer knowledge to schools and the general public. They explain the techniques of fishing and farming but do not explain the technical problems.

What should be transferred?

Producers above all need concrete, practical solutions that are immediately applicable. But it is not easy to quickly find solutions to all problems.

There is also a need to simplify and better explain all the administrative aspects of the profession. Producers are lost in the plethora of administration, regulation and paperwork.

An important role to play by the extension worker is to sort information. The information is available, it can generally be found but it is submerged in a flood of data. The information should be extracted and sorted according to the identified priorities.

Finally, it is important to remember that the transfer of information is not going in one direction, from scientists to farmers. Empirical knowledge is also important for scientists!

How to transfer knowledge?

CRC could publish again newsletters on a regular basis.

IFREMER could write information sheets in lay language, circulate summaries of its studies to producers via the CRC.

A good practice guide has been developed by the Cevalmar. This guide explains to shellfish farmers in a clear and simple language, every stage of the installation and the entire functioning of a shellfish farm. It is currently being updated. This is a good extension tool.

We must put in place an administrative and scientific monitoring.

Professionals should be involved from the beginning in the preparation and conduct of scientific research projects. To answer the questions raised by professionals, scientists must work with professionals. The project must be divided into several steps (milestones) so that it can be monitored, judged and redirected as required so that it responds well to the original question.

Meeting days between producers and scientists could be organized, with laboratory visits so that producers better understand how scientists work.

Those who transfer knowledge could organize joint forums with all stakeholders.

We learn that there is, in the fish farming sector, an annual exchange day with IFREMER during which the various stations of IFREMER open their doors. The next one will be held in Palavas, on the weekend of 8 -9 June.

PRESENTATION OF THE TOOLS DEVELOPED WITHIN EUROSHELL

1) Mapping the sector

Jean Prou, in charge of Work package 4 on useful tools for knowledge transfer, presented the mapping tool which is under development. With the Sextant team of IFREMER and the data provided by the research and industry partners of Euroshell, they are developing an interactive map of Europe, that shows the main areas of shellfish production, research centers, technical centers, training centers, professional organizations, etc.

2) Knowledge database

Mariella Eripret presented briefly the knowledge database which is under development as part of the Work package 3 on the review of current knowledge. This database will be accessible on the Internet and will collect all the useful knowledge for the shellfish industry, whether it results from applied or basic research, empirical knowledge or gray literature, whether from European, national or regional projects, of past, present and future projects. The project partners are in charge of gathering 20-30 projects per country (so about 120 summaries in total) to use as a 'demonstration' database.

This database will be available in the five languages of the project (French, English, Spanish, Italian and Dutch) and will then be used and supplied by extension agents, scientists, professionals...

PRESENTATION OF THE PROJECT « AQUAMED »

Myriam Callier, a researcher at IFREMER and French partner in the Aquamed project, presented the project and the links that could be made with Euroshell (see presentation in annex 6). This project, funded by the European Commission, aims to strengthen the Euro-Mediterranean partnership for the development of joint research projects to meet present and future challenges of Mediterranean aquaculture and support sustainable aquaculture in the region.

Specifically, it will implement databases and perform a mapping of the institutional environment, research and socio-economic characteristics of each partner country => These databases and the mapping may overlap with the similar tools developed as part of Euroshell.

The project also intends to initiate a multi-stakeholder platform to coordinate research and share common goals and planning. CRC reiterated several times during the day the need for a regional platform for shellfish farming. A link could be made at this level. This platform could also play a role in dissemination of research projects.

CONCLUSIONS AND EXCHANGES WITH PARTICIPANTS

Mariella Eripret thanked everyone for participating in this day of exchange. The report of the forum will be sent to all participants. The next forum will be held in Ireland, then in Spain, Italy and the Netherlands. The main ideas expressed in these forums as well as proposals and tools suggested by the Euroshell project will be presented at a second meeting of European stakeholders of the shellfish industry in January 2014.

The day ended at 5 pm.

LIST OF ANNEXES (IN FRENCH):

Annex 1: Presentation of Euroshell project

Annex 2: Presentation of the European Aquaculture Technology and Innovation Platform (EATiP)

Annex 3: Scheme of the vision of the shellfish industry

Annex 4: Presentation of the FLAG « Thau et son lido »

Annex 5: Presentation of the CEPRALMAR

Annex 6: Presentation of Aquamed project