

Executive Summary

CONFERENCE

"How can aquaculture contribute positively to food security in Europe?"

Tuesday 9th November 2010 Wednesday 10th November 2010

European Parliament, Brussels













A Conference entitled "How can aquaculture contribute positively to food security?" was held on the 9th and 10th of November in he European Parliament. It was organised by the European Bureau of Conservation and Development (EBCD) in collaboration with the Spanish Ministry of Environment, Agriculture and Fisheries.

Over 70 participants from the European Institutions, national administrators, representatives of the industry and research community met to discuss the state of the art of the aquaculture sector in the EU, with the aim of highlighting the ways forward in order to improve productivity and profitability of the sector. The challenge is represented by the need to satisfy the growing demand for aquaculture products.

The meeting was opened by MEP Pat the Cope Gallagher, the Chairman of the Conference, Alejandro Polanco Mata, General Director of the Department Fisheries and Agricultural Resources of the Spanish Ministry of Environment, Agriculture and Fisheries, and MEP Guido Milana.

The introductory speeches underlined that in the last decades, thanks to the expansion of the middle classes determining a preference for seafood and thanks to the awareness of beneficial nutritional contribution of these products, the world consumption of seafood products has increased significantly. Since wild fisheries resources are subject to catch constraints for sustainability, there is a huge potential for the development of aquaculture activities world wide. This potential is even greater in the EU, which is the main world market of seafood, still heavily depending (for more than 60%) on imports from third countries. The three speakers underlined the high level of environmental standards respected by the European aquaculture activities, and the consequent need to improve the image and governance of this sector: the public is not aware of the quality of the EU products. The fact that regulations are less developed in third countries is an advantage at the EU level but a deficit in terms of business. They all agreed that sustainability and the quality and safety of the products are the main issues. Alejandro Polanco Mata underlined that aquaculture should be included in the Common Fisheries Policy, since it is a pillar of this policy; and that is should be better integrated in the Common Market Organization, including support for Producer Organisations.













This request has been echoed during the whole Conference by many representatives from the sector. **MEP Guido Milana** referred to the "Report on a new impetus for the Strategy for the Sustainable Development of European Aquaculture" he presented to the Fisheries Committee and that was adopted by the European Parliament on the 17th of June 2010.

The Report revealed that the aquaculture sector in Europe suffers in terms of competitiveness from development costs in the field, to the price of the products. Besides the need to focus on safety and security of the products, the report highlighted the main weak points and advantages of EU aquaculture that were then discussed during the Conference. The sector needs to be better and more properly organized: with a plan for a management system, integrated with all the other activities. The integration is considered in the light of the ongoing work in the European Parliament on the Integrated Maritime Policy. The industries are asking for a simpler authorization system that can facilitate, together with the above mentioned proper organization, an increase in the investments, to enhance competitiveness and stimulate innovation. The sector should also be facilitated in extending to off shore activities. Finally the social dimension of the sector is highlighted in the report: the further development of aquaculture could create several new and stable jobs, contributing to the Europe2020 Strategy.

SESSION 1 – SETTING THE SCENE

The first session of the Conference, chaired by MEP Pat the Cope Gallagher, was meant to evaluate the importance of further develop aquaculture in the EU in terms of contribution to: food security in the EU (Courtney Hough – General Secretary of FEAP); food supply in the EU (Philippe Paquotte, DG MARE, European Commission); public health (Sachi Kaushik, INRA); food safety in the EU (Paolo Caricato, DG Sanco, European Commission); limitation of greenhouse gas emission compared to outsourcing of aquaculture to third countries (MEP Struan Stevenson, Vice Chair of the Fisheries Committee of the European Parliament) and finally in terms of contribution to satisfy consumer expectations (James Young, University of Stirling).













According to the FAO, aquaculture production worldwide has increased significantly, representing in 2008 37% of the fishery products produced. The demand will increase constantly, according to global demographic growth projections, and will amount to 30 millions tones by 2030 (according to the forecasts at the same consumption rate).

All the speakers underlined that Europe is the top global market for seafood products, but depends on imports at 65% of needs. Aquaculture in the European Union is in stagnation, with an increase of only 0.5% since 2001, as underlined by Courtney **Hough**. The data reported by **Philippe Paquotte** revels that EU consumption of seafood products is 23 kilos per capital average (against the world consumption average of 17 kilos) and that 23% of that consumption is due to aquaculture. The EU imports of seafood products are 50% more than the production, while exports are one third of the production, which is not anyway marginal. However exports of aquaculture products are limited since they represent only 7% of total EU seafood exports. They are focused on salmon, trout and mussel, often processed products on the basis of imported raw material. Except for mussels, the EU supply of the three other top 4 species, i.e. salmon, shrimp and pangasius, is mostly due to imports from third countries. Therefore, EU products are faced with tough competition from imports where supply is often more predictable, steady and standardised. To this end one key question was raised by Courtney Hough and was then echoed by other experts and was the basis for discussion throughout the whole conference: what is the supply model that the EU wants? The choice is either to become increasingly self-sufficient in terms of seafood production or to continue to rely on imports.

Philippe Paquotte underlined an issue covered by the second session of the Conference: the present organisation of the EU supply of aquaculture products suits less and less the evolution of the distribution sector and the expectations of consumers. One of his key messages was that there is currently no way to obtain a price premium for farmed fish, whatever its qualities.













In terms of contribution to public health Sachi Kaushik underlined that in Europe, fish contributes to between 6 to 20% of total animal protein intake; but in some developing countries this can go even up to 50%. Seafood is the unique source of EPA & DHA, of which the terrestrial sources (plants included) contain very little, if at all. An EU 6th Framework integrated project, "Aquamax" running from 2006 to 2010 involving 14 countries, conducted a nutritional intervention study with pregnant women, and focused on predictors of atopic disease and on the development of immune competence and atopic disease in infancy. The results of the project demonstrated that eating at least 150 grams of salmon per week during the pregnancy contributes significantly to increase the breast milk status of long chain omega-3 fatty acids, and favours the limitation of atopic manifestations in infants at the age of 6 months. Sachi Kaushik also stressed that under aquaculture conditions, it is possible to monitor and tailor the nutritional quality and the food safety. During the debate he also criticised the mis-information propagated by some medical professionals who contend that farmed fishes do not have omega3. Speaking on food safety, Paolo Caricato underlined that the EU approach of control over the quality and safety of seafood is not only on the final products, but throughout the whole chain. Regulation 178/2002 grants a high level of protection of consumers as far as imports are concerned: Article 11 of this regulation prescribes that "food and feed imported to the Community... shall comply with the relevant requirements of food law or conditions recognised by the Community to be at least equivalent... with requirements contained therein." Moreover, Directive 97/78/EC imposes a veterinary control of food and feed products coming from third countries. Paolo Caricato's conclusion highlighted that countries authorised to export seafood product to the EU have to respect the same standards as the EU. This point has been questioned by MEP Struan Stevenson and MEP Alain Cadec. MEP Stevenson stressed that the Vietnamese production of pangasius takes place in one of the most heavily polluted rivers on earth, the Mekong, and that this fish is then imported into the EU in large quantities Vietnamese factories daily pump thousands of tonnes of contaminants into its slow-flowing waters of the Mekong, he said. He questioned the modalities of the European Commission's













inspections in Vietnam, underlining the relatively small number of inspections conducted in the Vietnamese farms, compared to the huge number of the farms themselves. He also underlined the fact that the farms have been warned in advance of the inspectors' arrivals, who found only minor infractions. During the debate **Paolo Caricato** declared that the Commission does not have the resources to visit all the farms in third countries and that the farms audited are chosen both by the Food and Veterinary Office (FVO) and the Competent Authorities in Third Countries. Besides imports **MEP Stevenson** underlined the negative effects of outsourcing in terms of carbon emissions and in terms of socio-economic exploitation of workers. During the debate **Salvador Pier Antonio**, referring to the case of *pangasius*, underlined that the focus should not only be on the safety of the imported fish, but also on its value in terms of nutrients for the consumers, which are quite low for the *pangasius*, imported frozen.

Finally **James Young** underlined the complexity and the proliferation of the system of certifications that often confuse the consumers, and this issue will be raised also in the second session of the Conference. During the debate a question was raised on ecolabelling and **Philippe Paquotte** clarified that the ecolabelling of aquaculture products might be considered in the framework of the EU general ecolabel scheme once the scientific knowledge will improve.

SESSION 2 – SHAPING THE FUTURE OF AQUACULTURE

The second session of the Conference was meant to identify the weakness and challenges of the aquaculture sector from different perspectives, and it was chaired by MEP Struan Stevenson and MEP Alain Cadec

The session started by giving voice to the regional industries in: Greece (Lara Barazi-Yeroulanos, Greek Federation of Mariculture, who then intervened also as Vice-Chair of EATIP), Ireland (Richie Flynn, Irish Farmers Association), in the EU (Bruno Guillaumie, European Mollusc Producers Association), in France (*Gérald Viaud*, National Shellfish-farming Committee), in Hungary (*László Váradi*, Research Institute for Fisheries, Aquaculture and Irrigation).













Then a representative from the European Commission (Jean-Claude Cueff, DG MARE) illustrated the view of the Commission, and *François Simard* from IUCN had the chance to give an overview of Mediterranean Guidelines for aquaculture, while some representatives from public administrations offered the views of the Member States (*Cécile* Bigot for France – Lena Karka for Greece and Javier Ojeda for Spain).

Two innovative suggestions were presented in terms of improved governance: one related to the reduction of administrative burdens by Salvador Pier Antonio from FEAP and COPA-COGECA and the Aquainnova Project by Courtney Hough from EATIP.

Finally the perspective of the fish feed industry was presented by Alberto Allodi from FEFAC and Jonathan Shepherd from the International Fishmeal and Fish Oil Organization.

The last part of the session was dedicated to the debate and a round table discussion with Jean-Claude Cueff, Carlos Cabanas Godino from the Spanish General Secretary of the Sea, Alistair Lane, from the European Aquaculture Society and Petter Arnesen form Marine Harvest.

Commissioner for Maritime Affairs and Fisheries, Maria Damanaki, could not attend the Conference and and a concluding statement was made on her behalf by Dimitri Giotakos, Advisor in her Cabinet, while the concluding remarks were undertaken by MEPs Pat the Cope Gallagher and Struan Stevenson.

The speakers, through their presentations and the debate that followed, identified the following issues as the main challenges and obstacles to be overcome for a sustainable growth of the aquaculture sector in Europe:

1. Production – All the speakers and participants agreed that the level of EU aquaculture production should be raised in order to move out of the current stagnation of the sector and better meet the need of the EU market, which is overdependent on imports. The only exception was reported by **Cécile Bigot** regarding shellfish, where the approach should focus on how to overcome mortality rather than increasing production: 90% of French production of shellfish is consumed in France. **Carlos Cabanas Godino** stressed the importance of differentiating products.













2. Legislative constraints - The experts stressed the absence of clear, harmonised and simple rules and the need for legal security, rule of law, transparency and good governance in order to enhance investments. Pier Antonio Salvador underlined the proliferation of laws, regulations to comply with. Jean-Claude Cueff underlined that the constraints to the development of aquaculture were to be seen in the light of the existence of multiple others legal obligations that aquaculture has to comply with: protection of the environment, food safety, public health, animal healthy and animal welfare, consumers' information. Moreover, aquaculture defined as a shared competence in the new Lisbon Treaty is subject to EU and national initiatives according to the existing legal framework as well as the willing of public authorities to make it a priority or not.. In this context Carlos Cabanas Godino and Jean-Claude Cueff underlined that simplification should be mainly achieved at a national level. Lara Barazi-Yeroulanos stressed however that there were no coherence at national level in terms of legislation and also interpretation of the legislation.

Lara Barazi-Yeroulanos underlined that the 2002 EU Aquaculture Strategy was too weak and even though the revised 2009 one is more focused, it is still not enough and presents still many loopholes.

- **3.** The reform of the Common Fisheries Policy The industry called the European Commission to include aquaculture as a key pillar within the Common Fisheries Policy, through its ongoing reform. **Jean-Claude Cueff** stressed that after the adoption in April 2009 by the Commission of the Communication called "Building a sustainable future for aquaculture A new impetus for the Strategy for the Sustainable Development of European Aquaculture", and following the adoption by the European Parliament of its dynamic report on this Communication, the Commission was considering including aquaculture as a pillar of its policy within the framework of the Common Fisheries Policy (CFP).
- **4. Administrative burden** Most of the speakers agreed on the fact that the administrative burden in terms of licensing obstacle for investments and therefore for the development of the sector itself. **Richie Flynn** underlined that the licensing system should provide the industry with enough flexibility to adjust to fluctuation of the market; moreover he referred to the paradox of special areas for conservation in Ireland where













industry can obtain a permit to pump sewage, but no aquaculture license could be granted in the same area. **Javier Ojeda** underlined that notwithstanding the 66.000 kilometres of coasts of the EU, and the abundance of perfect locations for aquaculture farms, there are still serious limitations due to the complex, expensive and rather long procedures to obtain a licence, which sometimes can involve more than one administration. He also suggested that the transfer of existing licence from one operator to another should be facilitated by the law. **Javier Ojeda** stressed moreover that usually a fish farm needs a long period of time from the moment the licence is granted to the moment when the production actually starts.

- **5. Certification labels** Some of the speakers underlined the proliferation of certification labels that might confuse the consumers. **Pier Antonio Salvador** stressed that the certification increases the costs of the production, making more difficult for small enterprise to survive. Certification is presented as an additional cost that is not cover in the end within the profits. **Courtney Hough** stressed that neither the supermarkets, nor the consumers are willing to pay extra money for the certificated products. **Pier Antonio Salvador** proposed the adoption of a single EU label for aquaculture products. **Carlos Cabanas Godino**, on the other hand, underlined the importance of having certification, because consumers are concerned about social and environmental constraints. **François Simard** underlined that it is not a matter of certification only, it is rather a matter of sustainability: all products should be sustainable.
- **6. Unresolved conflicts over access to and use of space** There are different activities, sometimes conflicting ones, in coastal zones. Marine Spatial Planning must fully recognise the strategic importance of aquaculture for food supply and economic contribution, and this should be achieved through a full stakeholders' involvement. **Lara Barazi-Yeroulanos** reported the absence of Costal Zone Planning in Greece which severely impeded the development of the sector, while **Lena Karka** stressed that the Special Framework for Aquaculture is still in progress in Greece, and once adopted it will allow the transition from a situation of *ad hoc* management to a coherent statutory plan for aquaculture.













Alistair Lane underlined that in coastal areas the production of food (seafood products) is not a priority for politicians: he stressed the difference between the will of converting forestry areas into farms for food production, and the reluctance of dedicating coastal areas to fish farms for food production. Lara Barazi-Yeroulanos underlined that Spatial Planning is a long term planning, and the absence of it encourages companies to think in the short term, therefore it is counterproductive in environmental and economical terms.

7. Price constraints - The price is an issue from two perspectives: from the perspective of the internal products' prices: the EU aquaculture products' prices were increasing constantly until the 1980s and then a decrease started. On the other hand the very low prices of imports from third countries, where the social and economic standards may be lower than in the EU, prevent the EU market to develop further. **Lara Barazi-Yeroulanos** underlined that it is still very hard to balance costs and it is much harder to sell with a proper margin that allows investments for the future.

Market instrument – Most of the speakers underlined that the Common Organization of the Market (COM) was designed with the fisheries sector in mind, with little reference to aquaculture. **Lara Barazi-Yeroulanos** stressed that either there is commitment to profoundly reform the COM, or a separate instrument must be designed. **Richie Flynn** underlined that CMO is the clear mechanism that should be used for aquaculture as well: there is no mechanism at the EU level that allows the sector to respond in case of major disease for example.

8. Image of the industry – All the speakers agreed on the fact that the image of the sector needs to be improved through information and promotional campaigns. Consumers' awareness of what aquaculture does and contributes needs to be raised: too often the public either does not know anything about aquaculture, either has a wrong idea of a polluting and unsafe activity. The only exceptions seem to be freshwater aquaculture and shellfish, which, according to the experiences of respectively **László Váradi** and **Bruno Guillaumie**, are well perceived by the public opinion.













Lara Barazi-Yeroulanos stressed that a strategy should be designed to provide a stable, coherent and long-term legal status for the industry that can promote investment. During the debate Richie Flynn expressed his appreciation for the level of attention given to the sector's perspective by the MEPs present and by the European Commission that demonstrated to understand the industry, but on the other hand he underlined that no representatives from DG Environment and DG Sanco (apart from one of the speaker), neither MEPs from environmental political groups were attending the Conference and he stressed that the industry should put more efforts in trying to communicate the message to them as well. Petter Arnesen suggested starting with education for children at school to improve the image of the industry. MEP Struan Stevenson underlined that farmers are welcoming kids in farms to make them aware of the sector, and so fish farmers should do.

- **9. Organization of the sector** Many speakers stressed that an improved network of cooperation amongst operating companies would facilitate the predictability of the market, favouring investments. **Lara Barazi-Yeroulanos** underlined that there is a lack of effective communication among industries, and quite often reluctance from the sector to share data: every industry is operating on its own (at least from the Greek experience). An estimable forecast of production is implicit in the concept of farmed fish which is different from wild caught. Moreover, several speakers highlighted that the sector is rather focused on the volume of the production, than on the products themselves and on the demand from the market. Finally, the sectoral dimension does not permit the smaller entrepreneurs to invest properly. **Alistair Lane** stressed the need to focus on rapid development of inter branch organization between producers, processors and retailers.
- **10. Stakeholder consultation** Some of the speakers underlined the importance of a full stakeholders' involvement in the decisions to be taken for the sector. Some of the speakers highlighted a problem of public resistance toward the opening of new fish farms: stakeholders' consultation can overcome this difficulty. *François Simard* stressed the need to decentralize the management to the lowest suitable level, within marine spatial planning.













Stakeholders' involvement is a tool to implement the ecosystem approach: the balance between conservation and use of biodiversity will emerge from the management mosaic in the ecosystem. Javier Ojeda underlined that a bottom up approach would also facilitate a simplification of administrative burdens. Courtney Hough illustrated the results of the Aquainnova Project, run within the European Aquaculture Technology and Innovation Platform, as an example of supporting governance and multi-stakeholder participation in aquaculture research and innovation. An operational framework of dialogue has been created between the industry, the research community and the policy makers. using participative process. Petter Arnesen referred Aquaculture Dialogues as the most thorough global process on defining sustainable aquaculture practices ever conducted (started in 2004 - planned finalised in 2011). Within this initiative global sustainability standards for finfish, bivalves and shrimp (12 species in total – among them trout, salmon, pangasius and tilapia) are being developed through a process that involves a wide range of stakeholders (industry, governments, retailers, feed suppliers, NGOs, First Nations Groups, etc...). The standards that come out of the process will hopefully get sufficient uptake by producers. The recently established Aquaculture Stewardship Council (ASC), with its main office in the Netherlands, will be home of all the standards and the entity responsible for "getting them" to market".

11. Funds – Some participants underlined the importance of having a fund dedicated specifically to aquaculture, instead of being connected with the processing sector: it would be a step further to facilitate the development of the sector. Taking note of this request, **Jean-Claude Cueff** reminded that the political authority would decide which format to give to the financial framework which would host aquaculture in the forthcoming CFP reform. He pointed out that the shape and magnitude of new financial perspectives would not be known before the middle of 2011 and that the availability of money should be weighed against budgetary restrictions in the context of the present financial crisis. He noted with satisfaction that the aquaculture industry was more in favour of collective actions that direct aid to individual enterprises.













- 12. Fish meal On the issue of the use of fish meal and fish oil in diets, the industry highlighted the progress achieved in improving the composition of fish feed and the management of the resources. Alberto Allodi stressed that even though some issues have been addressed; still some legislative constraints exist, for example on additives for farmed fish and maximum contaminants levels in aquafeeds. Moreover, he underlined that the production of fish meals has not increased over the last 20 years. Jonathan **Shepherd** stressed that the market assures that wherever possible the fish goes for food rather than for feed. Moreover he stressed that there is still very little fishmeal and fish oil available from MSC approved fisheries; but IFFO recently has launched the Global Standard for Responsible Supply (IFFO-RS): in September 2010 there were 47 factories fully certified in 4 countries utilizing 6 approved fisheries, representing over 20% of the world production of fish meal and fish oil. Considering the criticism of "fish in-fish out" Jonathan Shepherd stressed that the proportion is anyway much less significant in aquaculture then in the wild. Jean-Claude Cueff stressed that this calculation is difficult. In relation to fisheries management he pointed out that providing raw material from fish natural resources is a matter for fisheries management rather that for aquaculture. **Petter Arnesen** added that, speaking from a perspective as the world's largest fish farmer, he can confirm that tools are now available for demonstrating that fishmeal and fish oil are derived from responsibly managed stocks of fish, and that this is a far more relevant consideration than any discussion about supposed ratios of fish-in to fish-out.
- **13. Off-shore and inland aquaculture** Some speakers underlined the need to develop off shore aquaculture and develop the legislative framework for it. *László Váradi* stressed that freshwater pond aquaculture is an unexplored opportunity in the development of food security and rural livelihood in many regions in the EU. Moreover he underlined the need for appropriate regulation, support for ecological and environmental services and compensation for the losses caused by protected species in aquaculture ponds.













14. Environmental and socio-economic benefits – Several speakers underlined the contribution of aquaculture farms to the creation of stable and skilled jobs, especially in coastal areas, and also in inland fresh water ponds, as underlined by *László Váradi*. Lara Barazi-Yeroulanos stressed that the average of employment age of aquaculture sector is 32-42 years old (compared to a much higher age in the fishing industry) of people working mainly full time (compared to the often part time in the fishing industry), of which more than 10% are women. Moreover Richie Flynn stressed that enhancing and favouring aquaculture in Ireland could be an appropriate solution to combat unemployment.

Several speakers underlined that, since aquaculture farms need high quality of waters for the safety of their products, they contribute to environmental protection. In this regards, **Bruno Guillaumie** and **Gérald Viaud** underlined that the quality of the products is link to the quality of the environment, especially as far as molluscs and shellfish are concerned, and they stressed that the current legislative framework is not sufficient to grant protection of resources and coastal areas. **Richie Flynn** stressed that that aquaculture farms are front line in terms of coastal security in facing disasters at sea, contributing to monitor the environment. **László Váradi** explained the environmental development aspects of its traditional fish pond in Hungary that contributes to the creation and maintenance of aquatic habitats and biodiversity, and cooperates in bioremediation activities. **Javier Ojeda** stressed that the public and the politicians need to understand that conventional intensive aquaculture production isn't necessarily incompatible with sustainability.

15. Research and innovation – All the participants recognized the need to support research and to enhance innovation. The Aquainnova Project presented by **Courtney Hough** demonstrated the importance of promoting the exploitation, dissemination and communication of research and technology development.













CLOSING SESSION

Dimitri Giotakos on behalf of Commissioner Damanaki, underlined that the Commissioner and the Commission have a close interest in what aquaculture can do for the European Union and what the European Union can do for aquaculture. In order to reverse the stagnation the sector is experiencing, Commissioner Damanaki is determined, and is already working for this, to give the sector the attention it deserves to make it a strong, competitive, innovative and leading industry. All the European bodies are supporting this vision. On food security, attention should be given to enhance technologies and environmental sustainability. Within Marine Spatial Planning, giving a clear space to aquaculture will attract more investments for business, and the Integrated Marine Policy will help this process. According to the Europe2020 Strategy adequate recognition is to be granted to activities that maintain jobs in rural areas, such as aquaculture. On governance the Commission will provide an EU framework for the development of sustainable aquaculture, setting common objectives and priorities, and the Commissioner expressed her commitment to maintain the strong political impetus for the sector and make aquaculture a full pillar of the Common Fishery Policy. Finally Dimitri Giotakos expressed appreciation for the debate held during the Conference, and underlined that the conclusions will help the Commission in putting aquaculture in the right place at the heart of the maritime and fisheries policy.

MEP Pat the Cope Gallagher underlined that aquaculture can fill the seafood deficit in the EU since it is a sustainable, renewable industry that create jobs in rural areas and food for future generations. It is an environmentally friendly industry when carried out in a sustainable manner. He then stressed that the range of regulations imposed on the EU industry need to be imposed also on the industry of the countries exporting to the EU: the same standards should be required.

He finally stressed, and **MEP Struan Stevenson** echoed him, that a strong partnership should be developed between the European Commission, the Council, the European Parliament, National and Regional Governments and the stakeholders to create the conditions to support the private sector so as to leave stagnation behind, to establish a competitive industry that is able to provide food, create stable and skilled jobs and create wealth (contributing to implement the Europe 2020 Strategy). The participants recognised the conference to be a first fundamental step in this direction.









