Programme: FP7 Cooperation
Theme 2 Food, Agriculture, Fisheries and Biotechnologies

Deliverable 44

Reports of the outcomes of consumer organisation briefing meetings

Project Acronym :	AQUAINNOVA
Project title :	Supporting governance and multi-stakeholder participation in aquaculture research and innovation
Grant agreement number :	245238 – FP7-KBBE-2009-3
Project coordinator :	European Aquaculture Technology & Innovation Platform

Presenting aquaculture developments to the European Consumers' Organisation

On October 2nd, during the meeting of Food Policy Officers of the member organisations of the European Consumers' Organisation (BEUC) in Brussels, Aquainnova was given the chance to present and discuss with participants some of the issues relating to European aquaculture.

The presentation covered:

- Aquainnova and its inputs to the EATIP Vision and Strategic Research and Innovation Agenda.
- A compilation of the outputs of EU research in aquaculture.
- Synergies and potential cooperation between EATIP and BEUC.

16 BEUC members were present, representing 11 Member States (see participation list in Annex).

EATIP Vision and Strategic Research and Innovation Agenda.

The first part of the presentation covered the current status of the European market for seafood and the stagnation in European fin fish and shell fish production over the last 10 years, despite 2 European strategies to address the situation and provide an impetus to production. The reasons for the stagnation – lack of harmonisation within MS to provide a level playing field; restricted access to space and inadequate licencing provisions for aquaculture activities and extreme economic sensitivity to rapidly changing markets.

The goals of Aquainnova and the supporting methodology by which the Thematic Areas of the EATIP had worked together (with more than 400 stakeholders) to prepare the Vision and the goals and sub-goals that form the basis of the Strategic Research and innovation Agenda, were then explained.

The Vision looks to triple aquaculture production in 2030 (4.5 Mt in 2030 compared to 1.3 Mt in 2010) and this will be based upon better understanding of the factors influencing development, be these technical, commercial or social. In 2030, the sector will be valued at €14 billion and supporting 150.000 direct jobs.

The BEUC representatives were informed on the official launch event, to be held in Brussels on October 30.

Compilation of the outputs of EU research

A special compilation of the outputs of EU aquaculture research was presented. It had been prepared as a description of the outputs of each project that came under several areas considered to be of interest and relevance to consumer organisations. These were in part derived from past experience (e.g. the CONSENSUS initiative) and from feedback to previous studies on consumer perceptions.

These areas included:

- Product quality, consumer safety and health
    - Seafood in the diet
    - Seafood safety
    - Processing methods, traceability and standards
    - Monitoring toxic algae
- Sustainable fish feeds
    - Fish meal/Fish oil replacement
    - Co-products and animal by-products
- Environment
    - Environmental interactions
    - Reducing wastes
    - Escapes
    - Environmental sustainability
- Aquatic animal health and welfare
    - Health networks
    - Immunology
    - Health monitoring and surveillance
    - Welfare
- Socio-economics
    - Increasing aquaculture production with environmental sustainability
    - Ethical aquaculture trade

Examples of research outputs and/or findings were shown, for example (under product quality, consumer safety and health):

- Gastro-intestinal health – where fish consumption helps overweight young people to lose weight while protecting lean body mass.
- The effect of fish oil on heart health was not as positive as had initially been anticipated and was associated with a lowering of heart frequency.
- Pregnant women eating two portions of salmon per week, significantly increase long chain Ω-3 fatty acids, selenium and vitamin D – and these are found in breast milk.
- Standardised real-time PCR assays for Hepatitis A, Norovirus and *Vibrio parahaemolyticus* – giving an early indication of risk to the seafood consumer.
- Mathematical model for histamine formation - including effects of temperature, salt, pH and carbon dioxide (modified atmosphere packaging).
- Intelligent labels which change depending on time and temperature and show the "Freshness Level" of food products and can improve cold chain management during transport and storage.
- Integrated strategies for worldwide mycotoxin reduction in food and feed chains.

Potential cooperation between EATIP and BEUC

The final part of the presentation addressed the synergies existing between EATIP and the Food Policy area of BEUC.

The core values of each organisation (shown here) fit well together and EATIP can be a preferred information source to BEUC member organisations on aquaculture issues.

The provision of fact-based information that addresses the concerns of consumer members of the BEUC organisations can be a useful service to the food policy officers of those organisations, and this was proposed by EATIP.

Summary of the discussion

Several comments and questions were asked after the presentation and lasting for considerably more time than had originally been foreseen. The principal points covered:

- Fraudulent labelling of fish giving negative perception to other species.
- Potential adoption of the Aquaculture Stewardship Council (ASC).
- Use of antibiotics (and other medication) in the sector
- Use of pelagic fish to feed farmed fish.
- Animal co-products (Processed Animal Proteins – PAPs) in aqua feeds.
- Fish labelling.

This issue of fraudulent labelling of *Pangasius* (panga) in Spanish fish markets was raised, observing that it had also given negative perception to halibut, the species that was the subject of the fraud in these cases. Given that the fish was being sold as chilled or frozen fillets, it was almost impossible for consumers to judge. Media circulated through social networks, sites and blogs has created a predominantly negative perception of this fish and hence the species (in this case halibut) that is the subject of the fraud is also suffering.

The Aquainova representative confirmed that this is indeed a problem and added that fillets of 'white fish' served in the HORECA sector (Hotel, restaurants and catering) could also be subject to this issue. The bottom line is that if the Latin name of the fish is not clearly stated (in accordance with EC food labelling Directives), the plethora of common names used in different countries for *Pangasius* could easily fuel consumer confusion about his fish.

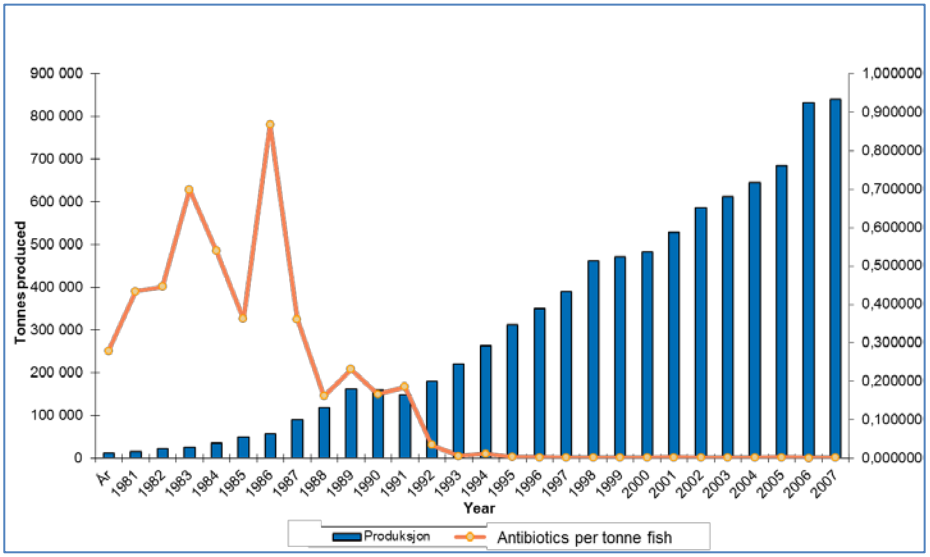
This led on to the second question, addressing the status of implementation of the Aquaculture Stewardship Council (ASC[1]). The opinion of the Aquainnova representative was that while the Marine Stewardship Council certification for global fisheries was limited to a certain number of species

[1] ASC is an independent not for profit organisation founded in 2010 by WWF and IDH (Dutch Sustainable Trade Initiative) to manage the global standards for responsible aquaculture, which are developed by the Aquaculture Dialogues, a program of roundtables initiated and coordinated by WWF. See http://www.asc-aqua.org

fisheries that could be certified as being sustainable, the ASC certification, based on standards developed through the Aquaculture Dialogues process for abalone, bivalves, cobia, freshwater trout, *Pangasius* (catfish), salmon, *Seriola* (yellowtail), shrimp and tilapia could be applicable to all farms worldwide producing these species. The current status on completed standards for these species may be found here).

Given the general support by major retailers to support the MSC programme (now further nuanced by some to suggest that they will only source from responsibly managed sources), it would be logical to suggest that some retailers may demand that farmed fish and shellfish are audited to this standard.

Concerning the Use of antibiotics (and other medication) in the sector, it was explained that for certain major farmed species such as Atlantic salmon (see graph from the Norwegian Seafood Export Council), antibiotics have not been used since 1996.



For other species, usage is based on the minor use minor species principle (Animal Health Act of 2004), intended to make more medications legally available to veterinarians to treat minor animal species and uncommon diseases in the major animal species.
It was also suggested that it is not necessarily in the interest of producers to use antibiotics (being frequently administered in aquaculture feeds), as those targeted fish that need treatment are often not the ones actively feeding, and that healthy fish ingesting the feed with antibiotic, may risk building up immunity.

On the question concerning the use of pelagic fish as raw materials for fish feeds, it was explained that the principal (anchovy) fisheries in South America that supply the bulk of fish meal and fish oil (FM/FO) to feed markets, are themselves undergoing significant change, that involves:

- A reduction in the amount of whole fish used for FM/FO production, with the use of trimmings (now constituting around 25% of the raw material for fishmeal production). This is produced from either white-fish which is low in oil (most of the oil is in their livers) or trimmings from oily fish such as herring, mackerel, etc.
- Implementation of a "sustainability standard" – for example the IFFO[2] Global Standard and Certification Programme for the Responsible Supply of Fishmeal and Fish Oil (IFFO RS) - recognising the importance of responsible sourcing, responsible production and responsible supply practices. Many IFFO members have already implemented third party assurances such as ISO 9000, HACCP systems and feed ingredient assurance programs.

[2] IFFO – The International Fish Meal and Fish Oil Association http://www.iffo.net

- Significant advances in the replacement of FM/FO by terrestrial plant protein and lipid sources, where currently, aquaculture feed manufacturers typically replace up to 30% of FM/FO by plant sources.
- Significant advances in selective breeding (e.g. Atlantic salmon now eat some 25% less than their wild counterparts) to produce the same biomass.

It was also mentioned that research is currently assessing the incorporation of algae (micro-algae and/or seaweeds) as raw materials to provide these nutritional benefits. This is an area of high interest, as algae are easy to produce and have significant eco-footprint advantages than terrestrial plants used for direct human consumption or for biofuel. Seaweeds can also be grown down-current form sea cage farms to 'mop up' dissolved nutrients from the cages, thereby reducing environmental impact and creating a second product that can be used for multiple purposes (feeds, cosmetics, pharmaceutical and neutraceuticals.

The re-authorisation of the use of non-ruminant processed animal proteins (PAPs) for fish feeds is an issue for BEUC, and when asked on hip opinion/position on this, the Aquainnova representative echoed the response of the European Compound Feed Manufacturers Association (FEFAC), that given that EFSA has provided clear scientific evidence that non-ruminant PAPs are safe, they can help in reducing the EU dependency on fishmeal imports and hence contribute to the Common Fisheries Policy reform goals of pairing sustainable wild fisheries with the sustainable development of aquaculture. He added that the fact that they are processed, means that they are not whole meals, but individual nutritional products that can contribute to the overall feed formulation and can also provide an additional source from which feed manufacturers may now choose.

This led on to the final point in the discussion, where the Aquainnova representative was asked his opinion on information that could be provided to consumers on fish labels. It was replied here that given that the first thing that consumers generally do with fish packaging is to throw it away, the information should be as simple as possible to be read at point of sale and to clearly indicate the requirements of EU Directives on labelling (origin, species, prior freezing, etc.), but also clear information on in-home storage and maybe cooking methods. The date of catch for fisheries products is a difficult issue under discussion at present, but the Aquainnova representative's opinion was that the date of harvest for farmed products could be a positive freshness indicator for consumers.

Links to supporting documents:

The Vision/SRIA of the EATIP - www.tinyurl/EATiPVision
Links to Compilation – Attached to this report
Links to FEAP 2011 Annual Report - http://www.feap.info/default.asp?SHORTCUT=617

Core partners of the Aquainnova project

EATIP	www.eatip.eu
FEAP	www.feap.info
EAS	www.easonline.org
AQUATT	www.aquatt.ie
EUROFISH	www.eurofish.dk
SINTEF	www.sintef.no

Annex. BEUC Food Experts Meeting

Brussels, 01-02 October 2012

List of participants

Name	Organisation	Email
Barbara Pfenniger	FRC	**b.pfenniger@frc.ch**
Camilla Udsen	FBR - DK	**CU@fbr.dk**
Camille Perrin	BEUC	**cpe@beuc.eu**
Charles Pernin	CLCV	**c.pernin@clcv.org**
Clara Meynen	VZBV	**meynen@vzbv.de**
Emanuela Bianchi	Euroconsumers	**emanuela.bianchi@euroconsumers.it**
Gemma Trigueros	OCU	**trigueros@ocu.org**
Henry Uitslag	Consumentenbond	**huitslag@consumentenbond.nl**
Karine De Crescenzo	UFC Que Choisir	**kdcrescenzo@quechoisir.org**
Luisa Villa	Altroconsumo	**Luisa.Villa@altroconsumo.it**
O'Rourke Raymond	CAI	**raymond.orourke@ireland.com**
Pauline Castres	BEUC	**pca@beuc.eu**
Ruth Veale	BEUC	**rve@beuc.eu**
Sigrid Lauryssen	Test-Achats	**slauryssen@test-aankoop.be**
Sofia Mendonça	Edideco	**smendonca@edideco.pt**
Tanja Pajk Žontar	**ZPS**	**tanja.pajk@zps.si**