Subject: Aquaculture consultation

In 2002 the Commission launched the “2002 Strategy” for the sustainable development of European aquaculture. The strategy is based on a ten-year vision of aquaculture as a stable industry guaranteeing long-term secure employment and ensuring health and environmental protection.

The strategy sets three key objectives:

1. Creating long term secure employment.
2. Assuring the availability of products that are healthy, safe and of good quality, as well as promoting high animal health and welfare standards.
3. Ensuring an environmentally sound industry.

Speaking for Denmark, objective 2 and 3 are basically achieved. The statements are normative and have not been quantified, but all available information confirms that fish from aquaculture are healthy, safe and of good quality and that the industry is environmentally sound. Technologies do exist that will further reduce the environmental impact, but industry growth is needed before they become attainable.

The demand for fish is acute. At present, the EU is the world's biggest net importer of fisheries products and continues to increase its dependency on imports.
The key issues are no longer the way in which we produce fish, nor the products we produce. The key issue is that EU aquaculture is stagnating.

One of the objectives in the “2002 Strategy” is to increase employment in aquaculture by between 8,000 and 10,000 full-time job. According to the strategy, the success of this objective depends on four sub-objectives:

- Increasing production growth rate to 4% per year.
- Solving the conflicts for space
- Promoting market development
- Improving the governance

Unfortunately, not enough has been done to meet these objectives. Global aquaculture production of fish has almost tripled in the period 1993 to 2004, but EU production has barely doubled in the same period, and for the period 2000 to 2004 EU production has been stagnating. Thus EU is losing valuable market shares in a growing market.

This performance gap is the real strategic issue, and it raises three questions:
Does the gap arise because of internal or external factor?
As the gap relates to global production, it is evidently due to internal factors within the EU.

Does the EU have the resources to close the cap?
The EU certainly has the resources but we need to focus these resources on the critical success factors. The introduction of the European Fisheries Fund is an important step, but new regulations for e.g. “organic" and "alien species" do not address the core issues.

Can a strategy be developed which will close the cap?
Yes. The EU has a very strong platform for unfolding a growth strategy, not least its competencies in policy making and research. The strategy should address the following four critical success factors:

1. Communication
One of the greatest obstacles to growth is the lack of a co-ordinated, coherent communications strategy. We urge the Commission to take responsibility in crafting a communication programme for aquaculture aimed at presenting the facts and addressing criticism and misconceptions about the industry. The communication strategy should address all relevant stakeholders, not least national and local decision makers.

2. Regulatory context/Licensing process
Current regulatory frameworks are unsuited to the sector's needs, particularly at Member State and local level. Bureaucratic delays and absence of specific legislation imply years of effort and many different authorizations to obtain the necessary licenses to operate.

The important licenses required for operation have to be obtained from local administrations. In this process, local NGOs tend to be more radical than National Government and can effectively block development. Differing interpretation of EU legislation at national level hinders growth against the declared EU policy of encouraging development of aquaculture.

Finally, short license periods do not stimulate investment, but do create uncertainty and confusion for the producer.
We think it is time for the Commission to change its strategic focus from environmental concern to business growth. The industry needs a legislative framework that is operational at a local level. At the moment, it is basically impossible for an EU farmer to increase production. The Commission needs to take responsibility in developing a harmonized licensing and approval system that stimulates growth.

In line with the subsidiarity principle, this action should be taken at Community level. Only with surety about their licenses and economic incentive will it be possible for farmers to make investments in modern technology that will allow continued improvements for the environment.

3. Fair and free trade
EU aquaculture is bound to comply with tight legislation on many issues, for example,

- contaminants and public health and safety,
- disposal of by-products
- availability of therapeutic agents
- waste product treatment and release

While we agree that these are important issues that should not be neglected, it is a fact that in many cases, products from third countries are produced without respect for such issues and, principally without the costs and losses associated. Trade disputes have been highlighted for salmon, large trout and seabass and seabream, with anti-dumping and/or safeguard actions being taken in several cases.

The application of measures after the event – when the damage has been done – inevitably affects the economic sustainability of the European aquaculture sector. The potential for a permanent and real-time monitoring of markets could be envisaged.

4. Profitable R & D
The Commission states, that "European research in aquaculture is among the most successful in the world....but it has probably made a much greater contribution to the development of this industry in other parts of the world". 
The Commission should encourage profitable R & D more than innovative R & D. We have a strong need for R & D but it must be linked to the regulatory context. R&D is of no practical use, if regulation does not permit implementation of new developments. We seek results that can be transformed into increased production. Hence R & D, industry needs and regulation must work together.

Apart from these general comments, we have the following answers to the questions raised in the consultation document

1. Do you consider it justified for the Community to develop a specific strategy for aquaculture and why?
Yes. In most Member States the aquaculture industry is very small and fragmented. The industry is heavily regulated, and the sector can not grow without political, technical and financial support. So a Community strategy is a key requirement for growth.

2. Do you share the vision for a sustainable development of European aquaculture as set out in the 2002 Strategy? Would you consider that it needs to be adapted to evolving circumstances?
The vision is focusing on employment, consumer health and the environment. While these are worthwhile concerns, we think that the Commission has the potential to be much more ambitious. The vision for aquaculture should reflect growth and ambitions - why not aim at being a net exporter of fish?

3. What effect is globalisation having on the EU aquaculture sector and what are the main factors affecting its competitiveness?
Globalisation encourages growth, prosperity and international trade, which translates into increased consumption of fish; hence demand is expected to grow. Globalisation also leads to faster dissemination and assimilation of know how and technology and this is likely to increase the supply of fish from aquaculture. However, this will not benefit the EU, if the Community or the Member States do not allow EU aquaculture to grow. On the contrary, EU aquaculture will gradually loose competitiveness, and EU will become even more dependent on import of fish. Some of the issues that currently lead to decreased competitiveness are: Higher production costs due to stringent environmental demands, excessive bureaucracy causing very lengthy licensing proceedings, resistance to growth and lack of technology upgrade.
The revised strategy should focus on growth barriers. Production growth and a flexible and dynamic licensing system will enable us to counterbalance higher productions costs via investments in technology and management.

4. How do you see the future of the market for Community aquaculture (niche markets, mass production ...)?
Assuming that Community aquaculture does grow, the market is likely to develop rapidly. The driving forces will be technology and marketing. Technology developments and improvements will lower production costs and create new opportunities. Market developments will lead to increased consumption of traditional species, but new species and markets will emerge.
The future market place is therefore a mix of mass production (“white fish”) and niche markets (new species, organic etc.).

5. How can the image problem of aquaculture be addressed to increase consumer acceptance of farmed products?
Our image problem stems from a long tradition of keeping to ourselves. The best way to deal with the image issue is to explain to the public what aquaculture actually is, and to put it into the right perspective. Please also see the above mentioned comments on communication.

6. What are the most important environmental challenges faced by aquaculture and what are the appropriate avenues to address them?
The most important challenges are the misconceptions about the environmental impact of aquaculture and the lack of a coherent regulatory framework for licensing. It is a key challenge to improve technology and make a regulatory context that can lead to long term decoupling of growth and impact. The present environmental impact of EU aquaculture is negligible, and the objective is therefore not to reduce current impact, but to minimise the environmental impact from a growth policy.
The appropriate avenue would be to include aquaculture in the Commissions Work Programme and make use of the impact assessments tool.

7. Can you identify, within the framework of Community environmental legislation, business-friendly options to regulate aquaculture activities?
Aquaculture should have the option of being regulated as any other industry, and on a quid pro quo basis: Investments in e.g. new technology, management or feed that reduces environmental impact should go hand in hand with increased
production. A fish farm should basically be allowed to produce whatever quantities it wants as long as the “impact quota” is not exceeded. Such a system is dynamic and transparent for all parties, as well as environmentally sound. The impact assessment analysis provides valuable input about the “impact quota”.

8. In a context of increasing scarcity of pure water, what are the main avenues to ensure that aquaculture producers continue to get access to water of the best possible quality for aquaculture development?

The question presumably refers to fresh water. It is evident, that the price of pure water - and "undisturbed water" - is increasing, as community wealth is increasing. The only solution is to make sure, that aquaculture can “pay” for the resource. This means, that aquaculture must operate with less water and/or use water that is of less value to the community. Both objectives require technology, and introducing technology requires growth.

9. What are the most important challenges related to animal health and welfare and how should they be addressed, in view of the different constraints faced by the aquaculture sector?

There are many opinions but few facts about this issue. This is always a dangerous situation as it may lead to wrong policies or hasty decisions. The most important challenge is therefore to produce hard facts in order to make sure that decisions are based on science -and not misconceptions. At present very little is known about fish welfare, and much more research is needed in this area.

10. What do you see as the most promising avenues in fish or shellfish domestication to provide opportunities for aquaculture growth in the EU?

Eel is an example of a fish where true domestication has not yet been achieved. The most promising avenue would be to focus and allocate sufficient R & D resources to solve the reproduction issue. Furthermore, bureaucratic restrictions are currently prohibiting the trade of seed mussels between regions. A lifting of this ban would increase mussel production in both supplier and receiver countries.
11. To what extent do you consider that fish oil and fish meal would represent a limiting factor to aquaculture growth in the European Community? Which option would you favour to reduce limitations from such feed?

Fish oil and fish meal are for sure limiting factors, and the best option to reduce limitations is to increase R & D funding into finding suitable substitutes.

12. What technological innovation would you consider most promising to allow aquaculture development in a limited space context? What are the main obstacles to their development and how could they be overcome?

Recirculation is the most promising technology for land based fish farming. There are many options for marine farming, and more basic research is needed in this area. There are several obstacles. One is to make sure that regulation and technology is linked - quid pro quo. Investments in new technology can only be financed via increased production, at least short term. Other obstacles are risk management, veterinary issues, general management of new technologies, financing etc.

Development and introduction of new technology requires a coordinated and holistic approach.

13. What are the main obstacles to access to marine or fresh water space for aquaculture activities? Would you consider that there is a need for public decision maker to set aside specific locations dedicated to the development of aquaculture?

One of the key obstacles is the growing use of the precautionary principle that seems to grow as the waterframe directive is being unfolded. Nobody knows what it takes to comply with the “good ecological status”, and this hinders development and growth.

It is imperative that specific locations are dedicated to aquaculture. It is impossible to grow aquaculture on a step by step basis. An overall “game plan” is needed, and this requires - as a minimum - that the stakeholders agree on where it should be located. Otherwise the local authorities will apply the NIMBY principle (Not In My Back Yard).

14. How could marine/maritime spatial planning be developed to provide appropriate conditions for the sustainable growth of aquaculture sectors in coastal and offshore waters?

The planning system needs to be accepted by the relevant stakeholders, and this calls for a holistic design approach. This is essentially an organisational issue, and
the relevant stakeholders should be invited to participate in the process. A
dynamic and efficient planning tool should also include the necessary
management tools, and this - again - requires an environmental impact
assessment scheme.

15. **How can we ensure that EFF implementation will contribute to**
    **sustainable aquaculture growth in the EU?**
Development and growth in EU aquaculture is depending heavily on the EFF. The 
EFF should be an integrated part of a national strategy for aquaculture. Member
States should be very clear about the objectives and strategies, and the national
aquaculture sector must be a key player.
There should be a reporting system - could be in the form of key indicators - that
provides data on the developments on an annual basis.
Sustainable growth needs to be defined. We must repeat that as long as we have
no measuring rod for “sustainable” it is hard to measure progress.

16. **Are there already some lessons to be drawn from the preparation of**
    **your National Strategic Plan and Operational Programme regarding**
    **aquaculture?**
The Danish National Strategic Plan and the Operational Programme was prepared
in close collaboration with the aquaculture industry and other stakeholders. This
means, that there is a general consensus about industry development. This is
important in relation to the local decision making.

17. **How can research policy be set in a strategic context to enhance its**
    **benefits, specifically for European aquaculture and/or European**
    **technology and know-how?**
The answer given to question 15 also applies to this question. It is very important
that the research policy reflects the overall strategy. It should give rise to
concern, that even though the EU is investing heavily in R & D, production is
stagnating.

18. **How can the transfer of research results be optimised so as to**
    **maximise the benefit to European business?**
A value chain has to be established that links the primary stakeholders, and the
national aquaculture industry should play a much more active role - not only in
decision making - but also in making use of the results.
19. Which cross-cutting areas in marine research would you consider most important for aquaculture?

The effect of climate change is an important area, as global warming may have serious negative impact on marine farming. Off-shore farming is another area. Less cross-cutting - but very important - is technical and commercial research into polyfarming of fish, mussels, seaweed etc.

Best regards

The Danish Aquaculture Organisation

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