

PROFET POLICY - Conclusions per workshop - Fisheries

I. Vilnius (Baltic Sea Fisheries)

How well does science address the fisheries problems and does it do so at too high a cost to the socio-economic fabric of the total stakeholder community?

A. *RTD (Practical)*

The Ecosystem Approach to Fisheries Management (EAFM) has had a significant impact on the direction of research projects in the region:

There has been considerable investigative work on fisheries in the Baltic resulting in substantial data relating to the main species – cod, sprat and herring. There is a perception that the validity of stock assessments in the Baltic Sea is questionable due to lack of verifiable data and there is obviously a major requirement to produce credible biologically-based stock assessments.

The problems of stock failures, recovery plans and IUU fishing are major fields of research and factors such as climate change, pollution and Marine Protected Areas are all being investigated in addition to the more traditional focus on controlling fishing activity.

The EAFM has brought the field of fisheries management to a new level in that it incorporates the views and contributions of all stakeholders, including fishermen and environmental groups. Integrating the new techniques of modelling the effects of extrinsic, and often rapidly changing, factors is a major thrust forward and becomes more refined with improved data input. Control measures, such as the tracking of IUU fish using biological markers 'bio-tags', are becoming more sophisticated and focused and the development of more selective fishing gear is still an important field of research.

B. *Managerial/Commercial*

Baltic Sea fisheries share their resource with a number of other stakeholders – heavy industry, windmills, tourism and recreational fishing to name a few. Fisheries management is pointless if it ignores the fact that fishing is an economic activity and must incorporate commercial viability for the industry into any credible plan.

The complexity of the Baltic Sea fishing industry makes fisheries management very difficult but there is a very clear demand for more integrated, multi-disciplinary advice for fishery managers. To make the best use of EAFM, there must be more long-term management systems but this is only possible if the necessary tools, such as on-going ecosystem evaluation, effort control and market conditions, are readily available.

C. *Social/Political*

All fisheries management activities in the Baltic are complicated by the number of different countries bordering it – not alone individual countries, but their alignment within global groupings such as the EU and the old Eastern European block. It is difficult to co-ordinate policies and research programmes which will answer the needs of such disparate entities.

Long-term management systems which confer long-term fishing rights to fishermen lead to a greater degree of self-regulation which is ultimately reflected in better prices. To reach this desirable balance, factors such as traditional fishing rights, political forces and the impact of changes in regulation need to be assessed. It is important to identify and analyse the linkages between fisheries, fishing communities and other sectors if a satisfactory long-term EAFM plan is to succeed.

II. Dublin (North Atlantic Fisheries)

Complex legislation which attempts to deal with every problem individually eventually becomes unworkable. Enabling stakeholders to solve their own difficulties on a regional basis, while conforming to over-arching principles of sustainable fisheries management, has a greater chance of long-term success. Technical conservation measures (TCM) can improve selectivity, reduce discards, protect sensitive habitats and species, protect juveniles and spawners but TCMs alone cannot replace catch and effort limitations or bring about stock recovery.

A. RTD (Practical)

This workshop posed the question “Why are TCMs not working?” The response would seem to be TMs are too complex and made more so by recovery plans. Most legal gear is unselective, there is no encouragement for the adoption of responsible fishing practices, the catch composition regulations are impossible to implement.

Research has been widespread and extensive in a number of key areas such as gear selectivity, bottom impact, fuel efficiency, prevention of by-catch of non-target species and the survival and behaviour of certain target species. There have been several large European Commission funded projects, complemented by national research, which have considered many of these problems but largely from the “fire-fighting” perspective – projects set up when the problem has already passed the simple remedial phase.

To get better results research does not require a major change in direction:

- Future research projects need to take account of the multi-faceted problems created by multitude of drivers rather than a discrete one-problem, one-solution approach.
- Research problems on a local or regional basis and apply results on a wider scale rather than the other way about
- Real time data collection must be improved
- More use must be made of modelling to solve problems - it is speedy, inexpensive and flexible – as long as the original data is reliable.

B. Managerial/Commercial

The application of TCMs has been divisive and controversial. To make these measures work fishery managers have several options:

- Improve gear selectivity and reward responsible fishing
 - Towed gears can be selective
 - But fishermen need to have an incentive to keep them selective
 - Static Gears are definitely more selective
 - But need regulation to stop effort increases
- Reduce complexity and remove ambiguity.
 - Consolidate and improve existing regulations
 - Regulate things which are easily measured and limit things which are hard to measure
- Create a level playing field
- Change doctrine from regulating on landings to regulating on catches

Managers must commit to real and tangible incentives for responsible fishing – in return, fishermen must be pro-active and adopt more selective gears.

C. Social/Political

The need for simplification of the regulations was a constant thread running through this workshop. The participants felt Regulation 850/98 was too complex and efforts to simplify, such as the 2001 attempt at codification, were not successful. The continual amendments to this Regulation since it became law has led to an accumulation of provisions which have never been reviewed or evaluated, making it very difficult to understand and impossible to enforce. Also, it was enacted prior to the establishment of the RACs and does not lend itself to the increased regionalisation of fisheries management.

The EU Commission admits the shortcomings of this regulation and proposes

- Evaluation and deletion of irrelevant provisions
- More regional regulatory structure built around existing RAC areas
- Incorporation of environmental objectives

These proposals need to be under-pinned by incorporation of a mechanism to allow for regular review and adjustment, the inclusion of stakeholder initiatives in a timely manner and regional solutions to regional problems.

III. Copenhagen (North Sea Fisheries)

There appears to be a need for greater integration of all branches of science when considering the issues raised by exploitation of fishery resources. It does not make sense to evaluate the impact on the ecosystem while ignoring socio-economic factors and, going forward, the integration and communication of these diverse disciplines needs more attention.

A. RTD (Practical)

The fishing industry had a very definite view of its research agenda based on better data and more knowledge of very specific species. On a more general basis it was felt that the level of discards being reported was not always the true picture and called for investigation of the causes rather than the number of occurrences. There was a call for more data collection by fishermen to improve the participation by the industry and the assessment of the impact of non-fishing activities, such as wind-farms, sand/gravel extraction and harbour works on fish stocks.

There has already been a very substantial body of scientific work achieved in the region and there was a feeling that rather than change the content of the investigations the route forward should concentrate more on the communication of results.

- Every research project should have a communication element as an integral component and
- Communication should be on-going during the life of the project rather than part of a final dissemination of results.
- Research projects should be structured to respond to findings and/or changes which may arise during its life-time and
- Facilitate interaction between scientists, stakeholder, users and the public.

- Inconclusive results should be dealt with as part of the project and risk management strategies developed to deal with uncertainty rather than the traditional precautionary approach

B. Managerial/Commercial

In areas where there is a mixture of capture fisheries and aquaculture, the economic drivers are different and need to be looked at separately. Capture fisheries have to be managed as an element of the ecosystem where the considerations are the effects of fishing activity, climate change etc. whereas aquaculture is managed with such factors as disease, genetic impact on wild species and sharing with other resource users as considerations. There are different requirements for both sectors when designing suitable research but there is a need for a common language and the ability to communicate with the entire range of stakeholders.

Future research should not ignore the potential input of commercial enterprises in associated fishing and aquaculture industries. They are likely to be end users of such research and could contribute considerable focus to practical issues.

C. Social/Political

The integration of socio-economic, ecosystem and the more traditional scientific approach needs addressing.

IV. Vigo (Fisheries & Aquaculture)

A. RTD (Practical)

The Profet Policy workshop on 'Integrating Fisheries and Aquaculture with Marine Environment Protection' demonstrated that European fisheries and aquaculture share many common problems and issues.

As one of the first international workshops to address policy topics common to these traditionally separate sectors, the workshop looked at a wide range of approaches to the workshop theme.

There seems to be a change in the approach of different stakeholders, where the protection of a common resource, the marine, is perhaps being replaced by the **sustainable exploitation of the largest global ecosystem**.

However, when referring to sustainable development, it is evident that development cannot occur without investment – which is best achieved from economically profitable operations.

The project presentations, made by senior representatives of European RTD project consortia, demonstrated that, while a **huge amount of scientific data** is available, there is still a **need for clear benchmarks** – from which progress can be measured.

- A lot of projects have identified this issue, where the **methodology for referencing 'sustainability'** is needed urgently.
- There was much reference to **integrated management options and systems**, where all of these efforts have to recognise the **validity of all stakeholders in the coastal zone**.
- **Effective and efficient area management** must be promoted, where **aquaculture needs to benefit from the application of spatial planning**.
- A key issue for European aquaculture is the manner in which **licenses for operation** can be obtained; in many European countries, there is a need for multiple licences – of different duration and scope – in order to function. The application of **spatial planning – allocating specific areas for aquaculture development** - as well as other related options, could facilitate these procedures.

The measurement of the effects of aquaculture on the environment were presented in a number of different presentations, including a demonstration of the ECASA (An Ecosystem Approach to Sustainable Aquaculture) 'toolbox', which includes modelling options for Environmental Impact Assessment of different types of marine aquaculture.

Events such as Profet Policy provide a unique opportunity to learn the different points of view of the stakeholders, **promoting better communication between science and the producer sector**. Within this, it is clear that the **Technology Platforms** that were presented at the workshop (local, regional and European) are definitely important players in the RTD arena.

The aquaculture sector is very concerned about **policies that reduce its economic competitiveness**, noting that it is still young, has made a lot of improvements but needs its benchmark positions. The goalposts are being moved regularly on a wide range of topics, including environmental as well as other operating issues – such as farmed fish welfare. All of these actions end by increasing costs of production while market competition, particularly with 3rd country imports, becomes more and more severe.

Certification and labelling, perhaps for proving sustainability since there is increasing pressure from the consumer and general society on this topic, **is a core point of debate for both fisheries and aquaculture**.

It was agreed by the Workshop that **communication must be improved at several different levels – on what science is doing to improve, on what the professional sector is doing on implementing recommendations, on how science and the profession are working together, on what the Commission is doing in respect of policy development**.

Identifying the best means of achieving such an effort should become a priority for all.

Multi-stakeholder cooperation and agreement is seen as essential for the future, where consensus agreement will be required while understanding the need to move quickly, efficiently and effectively.