

Report on a Conference on Fisheries Economics, 6-7 June 2002, Sophienberg Manor, Denmark

Kjartan Hoydal, Secretary, NEAFC

The conference was sponsored by the Nordic Council of Ministers and arranged by the Danish Research Institute of Food Economics.

Participants included fisheries economists, managers and representatives from the Nordic Countries and EU countries. NEAFC, OECD and the Nordic Council of Ministers also attended. The theme and the drift of the conference was to look into ways to bring economic analysis - based on account statistics - to the same level as biological analysis when advising managers on management measures for fish stocks.

Presentation of national data collection programmes

Anita Kjeilen Steinseide, Directorate of Fisheries Bergen, Norway, presented detailed data on the profitability of different vessel groups based on fleet, fishermen and accounting statistics. She gave details of time series and criteria for the stratification of fleets. The registers involved were also described. The statistics are based on stratified sampling.

Ásgeir Daníelsson, National Economic Institute, Iceland, described the Icelandic system of collecting account data. In the Icelandic system, the company is the basic unit and data on land based production and vessel data are sampled in parallel. Samples are large for bigger vessels ranging from 88 % in freezer trawlers to 11 % in boats less than 10 GRT. They also collect data from tax declarations. Thirty-fourty % of Icelandic fisheries are quoted on the stock exchange and this is a further source of data. Data and statistics are presented on www.ths.is.

Kim Normark Andersen, Danish Institute of Food Economics, described economic data collection programmes in Denmark, based on large, representative, stratified samples from fisheries companies. Statistics are given on the website www.sjfi.dk, data og statistik. There are difficulties because vessels are not legal entities. Details can be found in the sales note register, vessel register and register of legal entities. Accountant firms participate. The threshold value for sampling is sales of 27,000 Euro in 2001 and a minimum period of activity of six months. Sampling was based on 11 economic size groups, 18 product combination groups and 24 fleet segments. Fish products are the target.

Joacim Johannesson, National Board of Fisheries, Sweden reported that compilation of data in Sweden is defined by EU requirements. Company accounts, tax reports and forms filled out on data related to vessels are used. Fleet stratification is based on mobile and passive gear, vessel length, sub-grouped by the main species caught. Hitherto managers have not shown great interest, but this may change.

Jarno Virtainen, Finnish Game and Fisheries Institute. In Finland data are constructed from business statistics, fleet statistics and sales notes.

Óli Samró, FAREC - the Faroe Islands has for some years produced comparative statistics between fishing industries in the North Atlantic and fishing sectors in Iceland, the Faroe Islands

and Norway. The main target of the analysis has been to make data comparable and update them annually. Customer groups are business decision makers in the fisheries sectors in the three countries. Species fished, markets and fishing fleet composition are similar in the three countries, but business and legal frameworks are very different. In Iceland shareholder value is very important and vertical integration is the rule. In the Faroe Islands there is no vertical integration and very fierce competition between fish plants for the fish landed. This has led to very high fish prices. In spite of this, Faroese fish plants have had excellent results and are very competitive. In Norway, regulation is stronger and market forces weaker. Fishing rights are almost fully transferable in Iceland. In Norway they are not transferable in a legal sense and the Faroe Islands are somewhere in between. The FAREC system is based on accounts and it is also possible to forecast.

First summary, 6 June: The Chair, Hans Frost, Danish Institute of Food Economics listed the following leads: Iceland and Norway have a long tradition of collecting account data, Denmark a shorter and in Sweden and Finland, this is quite recent. Reasons for gathering data also vary. Most programmes use several sources, but sampling is an important element. The impression is that considerable information is gathered. Data on assets, liabilities and investment seem to cause problems. The list of users appears limited and the data are not being used to the extent that they could.

The company seems to be the basic unit but the vessel may be more appropriate. This is because management addresses vessels and fleets. The difficulty is to link profitability and other key elements to the vessel. Fishermen and capital are included as inputs, but what about fish stock capital?

The presentation of results and indicators has not been discussed. Comparisons between countries will require standardisation. Finally, the problems of sampling should also be addressed.

Experience of economic data collection and use of economic information within the EU

The EU-project "Economic Assessment of European Fisheries" was presented by Pavel Salz, the Netherlands, project leader.

There are problems in comparing and totalling statistics in the EU because of differences in definitions. In France, a fisherman is a person who stays more than three months in a fishing vessel; in Denmark a person who derives more than 60 % of his income from fisheries; in the Netherlands, crews on active fishing vessels, etc.

What is a number? Why do we measure? What about objectivity? This has to be seen with respect to *context, feasibility and epistemology*.

Do we want, perfection or interpretation? There are huge differences in perception between stakeholders. Numbers have meaning to those who produced them.

The project has not imposed common methods, national relevance is important. This means that, when data are compared, this cannot be done in a real statistical sense but they have to be interpreted. This is the only practical approach.

Major differences between countries are:

- Cost of maintenance
- Investment (replacement, insurance, historical or book value?)
- Depreciation and interest costs (age of vessel is a major effect).
- Gross cash flow and revenues do not appear to cause problem

- Running costs are also relatively simple
- Exchange rate corrections are difficult in the time series, as are tax distortions.

So we go for gross revenues, gross cash flow, values added, crew share and employment, profit. We want to know how the industry is doing, what are the chances that it will be forced out of business?

There is coverage of 50% of the EU fleet, which is variable in the various Member States. An annual report is produced with short and medium term performance indicators. A picture is emerging which should be useful but there are still problems with consistency, completeness and precision.

Further development will be the breakdown of comparisons between regions. The economic consequences of ACFM's advice have also been calculated in the project, but this has not been used to date.

Experts are needed to interpret the results. Interpretation becomes very superficial when it is not known how the statistics have been collected. It is necessary to know what the users really want to know and very few questions are forthcoming from users.

Relevant questions:

1. the economic nature of the fishing industry, from net to plate,
2. economic processes in society,
3. choices between various options and their consequences,
4. a cost effective policy build "with the nature" not "against nature";
5. and cost between policy budget and business reality (for example, decommissioning)

Numbers vs. process. The numbers change continually and lead to different conclusions; the process does not change because it is based on the basic economy of the fisheries.

Interest in economic information is weak and deteriorating at a national and EU level, there are insufficient links to the policy making process. The meaning of economic figures will remain evasive as long as the principles of the economic process are not appreciated at the institutional and political level.

Second summary, 6 June:

The basic problem seems to be that there is no real belief in fisheries as an economic activity. How can choices between policy budgets and business reality be prepared? The users are the management authorities, but it is doubtful whether they are concerned with the real problems. Everybody seems to be interested in economics, but not in using the information

In the discussions the following points were made:

One manager liked to see the focus on utilisation of the available resources. Should they be exploited with flexible fleets or with specialised vessels? The reply to this was that vessels are the production unit. The question shows the traditional management approach to fisheries. Fishermen make their own choices. One representative considered that the resource is the important thing, not the vessels.

The point was made that fleet data were the key to combine biological and economic advice. Fleet data are at the basis of biological fish stock assessments (although not presented to managers) and fleet data are also at the basis of economic data.

It was noted the examples from the Faroes and Iceland show that fisheries there are an economic activity. The EU Common Fisheries Policy is focused on production, and not income and revenues.

The data collection programme of the EU and bio-economic modelling

On the second day, further details were given on two data collection programmes with particular reference to economic information by Mr. Juan-Pablo Pertierra, European Commission DG FISH and the Director of the Statistical Department of the Danish Research Institute of Food Economics, Wøgg Løwe Nielsen. One of the main points made was that it is necessary to use data already available for other purposes and look into how they were produced.

In his presentation Professor Ola Flaaten, University of Tromsø, reported on the demand for economic data in fisheries management from a scientific advisory point of view. He focused on the transfer of money to the fisheries sector and costs which were not borne by the industry such as cost reducing support, general service and management costs. Norway had also looked into bio-economic models from the point of view of cost.

The rest of the day was used to present the value of economic data from public authorities and society's point of view and one manager (Mogens Schou, Danish Ministry of Food, Agriculture and Fisheries) and one representative of the fishing industry (Niels Wichmann, Managing Director, Danish Fishermen's Association) made presentations.

In the presentations and the ensuing discussion the following points were made.

There seemed to be a general feeling that decisions on fisheries management are made without considering economic consequences. A number of reasons for this were mentioned but it was acknowledged that this did not produce optimal solutions for the societies involved. In some of the northern countries there is development from purely political regulation towards the stronger influences of market forces. This increases the demand for, and practical use of, economic data. Discussions on resource rent also call for economic data. This also results in a more long-term view from investors, based on stock accountancy. In continental Europe, authorities are much more involved in macro- and micro-management. This is, to a large extent, the result of competition between different flag states, a number of different harvesting methods and the generally mixed nature of the fisheries. The overriding obstacle to reaching more sustainable solutions is over capacity. In the process of solving that, economic data are of great importance. Breaking fisheries management down into more homogenous regions may make economic comparisons more meaningful.

From managers present there was a call for practical targeted solutions, which were open to public scrutiny and discussion, and economic analysis of social and political aspects of management. The fundamental question is: Do managing authorities want to become involved in implementing management measures based on economic considerations at all? The fishing industry expressed the wish that the economic effects of certain management decisions, mainly based on biological advice, were assessed, that knowledge and experience in other countries was taken into account and that the whole value chain of fisheries was brought into the equation. It was seen as very advantageous to let stakeholders participate in the advisory process, together with biologists and economists. This would result in advice that would be more acceptable and easier to act on.