The European Association of Fisheries Economists

TURNING THE TIDE IN EU FISHERIES POLICY

THE FUTURE OF THE COMMON FISHERIES POLICY
A RESPONSE BY THE EUROPEAN ASSOCIATION OF FISHERIES ECONOMISTS TO THE EUROPEAN COMMISSION'S GREEN PAPER[1]

At the Annual Conference of the European Association of Fisheries Economists (EAFE) held in Salerno, Italy in April 2001, a session was devoted to discussion of the EU Green Paper on the future of the Common Fisheries Policy (CFP). The session took the form of a round table discussion with contributions from invited members and guests, and from the floor. It was agreed that the keynote speech[2] should form the basis of the response below by EAFE.

1. The Nature of Fishing

Fishing is an economic activity which exploits a self-renewing common-property resource, fish stocks. The absence of effective stewardship permits a race to fish which are free to the user but which nevertheless have an economic value. This separation between the private cost and the economic cost causes a market failure. It creates an externality - a spill-over effect - which manifests itself as an incentive to overcapacity and over-exploitation.

The fundamental problem has been known for decades (Warming 1911[3], 1931[4], Gordon 1954[5]). In a debate about a proposal to extend common-property rights by cancelling the fishing right the famous Danish economist Jens Warming, Professor of Economics at the University of Copenhagen, was the first to show, as early as 1931, and which has been demonstrated many times since then by other economists, the social loss that would be incurred.

There is no recognition of this in the Green Paper. Instead, with minor adjustments the proposal is for the CFP to continue using the same approach as at present except that regional management and greater industry participation in management decisions are vaunted. There is no indication as to why instruments which the Commission acknowledges have been a failure will be more effective in the future.

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[1] European Commission (2001) *The Future of the Common Fisheries Policy*, Green Paper, Volumes I-II, Office for Official Publications of the European Communities, Luxembourg.
[2] Andersen, P. (2001) *Turning the trend in EU fishery policy: The Green Paper*.
[3] Andersen, P. (1983) 'On rent of fishing grounds': a translation of Jens Warming's 1911 article, with an introduction, *History of Political Economy*, 15:3, pp 391-396.
[4] Warming, Jens (1931) Aalegaardsretten, Nationaloekonomisk Tidsskrift, Vol. 69, pp. 152-161.
[5] Gordon H.S, (1954) The economic theory of a common property resource: the fishery, *Journal of Political Economy*, Vol 62, 124-42.

Moreover, the risk is that owing to the lack of a new approach, which today ought to be based on a more stringent economic approach, the Commission will attach the same priority to identical tools experimented with so far. In particular, the Commission could possibly reinforce them through more stringent constraints on the fleets and MAGPs which, as the measures themselves have already shown, will not prove to be effective.

The situation as described by the Green Paper is this:

- Most important EU fish stocks are over-fished;
- Most fleets in the EU demonstrate over-capacity;
- The management instruments in use do not work.

The Green Paper blames the management failure on limited adoption of multi-annual approaches (though the problems associated with them have been studied in detail[6]), the Council of Ministers for fixing some TACs above the scientific recommendations, and weaknesses in scientific advice. It also states that there is no organisation to co-ordinate and develop advice from economists, ignoring the existence of EAFE whose inauguration it encouraged.

Economists remain concerned at reports of the state of EU fish stocks and can see little in the Green Paper that will encourage their conservation or recovery. There is also concern at the extent of over-capacity apparent in the EU fleet and the absence of anything constructive in the Green Paper that will match the size of the fleet to fishing opportunities.

Nevertheless, over-fishing and overcapacity, however serious, are merely symptoms. The consequence of the management failure is that potential economic rent for society from the fishery is being wasted, and no strategy has been proposed in order to deal with this issue, which is strategic and necessarily deals requires a mix of economic tools.

2. Fishing as a Wealth-Creating Activity

A clearer way of setting the objectives for fishery management is to seek to maximise the economic returns to society, as opposed to short-term financial profit-making, subject to the constraints imposed by the economic system and the biological system. Examples of such constraints include:

- Stock dynamics
- Precautionary stock targets
- Bio-diversity of the stocks and other marine life
- The level of employment in specific regions
- The level of income for fishermen.

The economic rent, sometimes called the social rent - best represents the returns to society and to pursue it introduces the fewest behavioural distortions while achieving the best possible resource conservation strategy.

[6] Salz P., *et al* (1995) *Bioeconomic Evaluation of Multispecies and Multiannual Fishery Management Measures*, Report for the EU Fisheries Directorate, Brussels.

Once the basic system had been introduced a stepwise approach to the objective could be followed using an economic reference system[7]. Such a system is called for in the Green Paper (Item 5.1).

Using optimal to mean a reasonable best estimate, the outcome of seeking to maximise the rent should be:

- Optimal capacity
- Optimal stock levels
- Optimal catch rates
- A set of shadow prices providing information about the system

3. Economic Incentives

There is little or weak discussion in the Green Paper of how economic incentives affect important aspects of fishing:

- Overcapacity
- Stock decline
- Discards
- Choice of gear
- Age composition in the fish stocks
- Monitoring, control and enforcement

There is too little discussion about the need for and value of research. A difficulty with much of the research commissioned by DG Fisheries in support of the CFP is that the research briefs assume that only the existing institutions can deliver stock conservation. They ignore the influence of the economic incentives instead of trying to identify their magnitude and direction.

The most serious shortcoming is an absence of any indication that the Commission understands that overcapacity is largely caused by the presence of an incentive to over-invest and that public aid and improved stock levels increase the incentive. Most of the other consequences stem from this single factor. One whole area of the current CFP, the Multi-Annual Guidance Programme (MAGP), is designed to combat it but being utilised in isolation gives poor, if any, results. There has been no impact evaluation on the fleets' behaviour emerging from the MAGPs.

The approach to capacity in the Green Paper is indicative of the whole direction of the proposals for the future CFP. Overcapacity lies at the heart of the fisheries problem but the Green Paper proposes that the CFP should continue with a system that fixes quantitative objectives to be achieved over a defined period. Having recognised that this has already been a failure, the Green Paper proposes that the regime should be strengthened to overcome the effects of technical advance, implying that it is not the measures themselves that are at fault.

[7] Rodgers P, H.Frost and J. Lokkegaard (2001) *An Economic Reference System for Managing the Impact of Fishing and Natural Predation*, Paper presented to the North Sea Commission Conference on Predation and Technical Interactions on Fish Stocks in the North Sea, Ringkoebing, Denmark, 12th-14th September 2001.

It is then proposed that the measures can be made effective by requiring a significant nett withdrawal of capacity when a vessel is replaced or a licence transferred. Such a withdrawal of capacity is theoretical, a reflection of the particular definition of capacity chosen, and in any case is no more than a wish that the member states will do in the future what they have failed to do in the past.

The fallacy resides in a belief that capacity is one-dimensional. In fact, when one input is controlled fishing companies simply shift into another input. Copes' Law – if fishermen can get round a regulation they will get round a regulation – applies and the capital structure of the fleet will become distorted. The success of the proposed structural policy will initially depend on the elasticity of substitution between controlled and uncontrolled inputs but the Green Paper does not address this and the quantitative objectives will not be achieved. It is not the strength of the measures that has been inadequate but the measures themselves. None of the proposals[8] for the future of the CFP seek to tackle the economic mis-incentives that cause overcapacity.

4. Economic Instruments

The Green Paper states that from the economic and social dimension "If current policies and approaches are not changed the European fishing sector will become less and less sustainable and economically viable" (Item 3.6) but suggests that the policies and approaches should remain the same though carried out by regional management structures with stronger industry input.

Even if it is of great importance, the actual question is not who manages the fishery but what instruments affect and correct the economic mis-incentives. A number of instruments exist, depending on the environmental, biological and social structures of European fisheries.

It is clear that the ownership of the right to fish must be clarified. Ownership may be either private or public. Whichever, the quota available from the stock will acquire a value if the harvest is limited. Thus right-based management will create an incentive to conserve the stock, so long as the owner is not facing a cash-flow problem.

A right-based system can be constructed within the framework of the present CFP either via Individual Transferable Quotas (ITQs), or under common public ownership when a fee could be charged for the amount of fish taken. Other possibilities exist, in particular in the Mediterranean, where right-based systems are more oriented towards the introduction of self-management or co-management tools in given fishing grounds. In these cases, fishermen have the direct responsibility, together with scientists and the administration, for dealing with resource conservation.

Discussion in the Green Paper on the implications of public aid or subsidisation or the conflict between subsidies for decommissioning vessels and re-building for modernisation is limited to the instruments. A more fundamental discussion of the implications of public aid for capacity and safety is needed.

[8] *Green Paper*, pp 26-28.

In fishing there are three groups of factors of production; resource, capital and labour. To fishing enterprises the resource is generally free. Capital is frequently subsidised, reducing its cost relative to that of the alternative, labour. Thus the Financial Instrument for Fisheries Guidance (FIFG) encourages a distorted use of more capital than would otherwise be the case, at the expense of labour. The Commission is concerned to maintain employment in fishing yet its own policies mitigate against this.

Likewise the need for decommissioning under a right-based management system is not discussed. The vessels in the existing fleet include many with amounts of sunken capital; capital which has been written-off in the company accounts or could not be redeemed, but which still has earning potential. This will seriously delay the commencement of any reduction in capacity expected of the system because some vessels would appear to be making a profit when in practice they were not.

Discussion in the Green Paper of the situation in the Mediterranean is also weak. The situation is economically similar to that in the Atlantic and Northern fisheries despite important legal and environmental differences.

Territorial waters extend no more than 12 miles and the high seas fishery is concentrated on tuna and swordfish. The structure of resource stocks is largely different from those existing in Northern Europe and Atlantic fisheries and for many reasons well known to biologists and management single species stock assessment has proved to be ineffective[9].

From this perspective, it is clear that there can be no reports similar to those of ICES for northern waters, even if systemic knowledge of Mediterranean resources is known. Under these circumstances, TACs are rarely set[10] and only on a few individual stocks, such as tuna and clams.

Nevertheless, in some cases, the fisheries exhibit overcapacity, as is predicted by economics and could be managed in a more efficient way. The absence of TACs means that, despite their relative long-term inefficiency, input controls on the amount of fishing, together with a long-standing tradition of governance based on concerted action among fishermen, administration and economic and scientific research, are the main method of management.

The results of this approach can be seen in the inter-temporal stability of landings in recent years. These methods appear to have been used with some success in Italy, though the long-term results remain to be seen. Often they have been imposed voluntarily by local fishing organisations, such as by the Spanish *Cofradias* and Italian co-operatives. It is equally important to stress that these measures are unlikely to prove effective in northern waters because of the different structure of the fishing industry.

[9] Spagnolo M. (1996) ***Italian Policy-Related Research,*** Working Document No.3, within the Concerted Action "Co-ordination of Research in Fishery Economics" (AIR CT94 1489), EC, DG XIV, Brussels,

[10] Spagnolo M. (1993) Individual Transferable Quotas: The Italian Case, in: *The Use of Individual Quotas in Fisheries Management*, OECD, Paris,

The current CFP sets out a framework that does enable fisheries to be effectively managed. The difficulty is that the responsibility for implementing such systems has been retained by the Member States. There is no proposal in the Green Paper to change this but a different distribution of competencies, still based on economic rules, is needed for efficient fisheries management. The Commission does not have the power to introduce such systems and the powers it has (mainly capacity controls and technical conservation measures) are out-of-date. They cannot correct the market failure, though they can destroy a market and its product[11].

If there is no change in the legal framework distributing competencies among the Commission, regional, national and local management bodies, it seems unlikely that Member States will autonomously give up their responsibilities to supra-national regional management authorities. If not, then the proposed regional bodies will start with the same handicap that the Commission has at the moment.

5. Conclusion

The Commission faces two problems:

- establishing a universal and appropriate right-based system depending on the structure of different fisheries, whether it be through ITQs, self-management or co-management,
- the adjustment process, particularly the use of financial resources for accompanying measures to support the sector and enable fishing enterprises to adopt a more stringent set of agreed rules.

The Commission must recognise the fundamental problem of the externality and that it does not have the power to deal with it. There needs to be more focus on:

- Fishing as an economic activity using labour, capital, and fish stocks.
- The fishery as an wealth creating activity (resource rent),
- The direction and strength of economic incentives,
- Management by use of economic instruments.

The conclusion is that by the end of the first ten-years of the new CFP, unless Member States have moved independently to introduce right-based systems (through ITQs, self-management, or co-management), more stocks will be in trouble, the fishing industry will be facing re-investment problems, and fishing power will have increased despite MAGPs largely being met.

In other words, as the Green Paper proposes the same measures for the new CFP as have been in the current system, the outcome can be expected to be virtually the same, unless the level of failure has become so great that Member States are forced to save what they can of their fishing and fish processing industries by acting unilaterally, as is the rule in the Mediterranean.

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[11] Smit W. (1988) 'The Dutch Herring Fishery: A Case Study of the Effects of Stock Management on the Structure of the Industry and its Market', *Proceedings of the 4th Biennial Conference of the International Institute of Fisheries Economics and Trade*, DIFER, Esbjerg, pp 757-761.