A Response to the GREEN PAPER: Reform of the Common fisheries Policy

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Summary of recommendations

- A better measure of "success" of a fishery should be found than Maximum Sustainable Yield.
- Recreational fishers should be part of the new CFP
- The practice of discarding dead fish should cease immediately.
- Policy should tend towards socio-ecological benefits rather than directly economic returns.
- The pain of change should be felt mostly by those portions of the fleet that impact most on the environment.
- Transferrable rights should be implemented at the level of communities and/or fishers' organisations rather than individuals.
- Rights to fish should not be treated as tradable commodities.
- Fishers should set management objectives. EU grants to build capacity amongst communities and fishers organisations should be made available to aid this aim.
- Management mechanisms should be such that they can deal with constant ecological/economic and social change in a realistic time-frame.
- Fish should not be exported from the EU or imported from non-sustainable fisheries.
- Tourism should not be viewed as an alternative occupation for fishers.
- More effort is required by national institutions to incorporate an understanding of social science into fisheries management planning and policy.

Background of the authors

Dr Magnus Johnson is a marine biologist at the Centre for Environmental and Marine Sciences, University of Hull, England. He has broad experience of environmental marine issues in Europe and the Tropics. He has worked extensively with small-scale fishers along the East coast of England and has a particular interest in the local static gear fleet for whom he has occasionally functioned as a consultant. Postgraduate students in his research group have investigated the behaviour of fishers, the economic value of inshore fishers to local communities, long term trends in inshore fisheries and the behavioural ecology of commercially exploited species.

Mr Mark Prime is a postgraduate research student at the Centre for Environmental and Marine Sciences who is currently engaged in trying to bring together disparate sources of data so that we may better understand the history of inshore fisheries around in English coast.

The Green Paper

A step forward

The production of this green paper represents a step forward in EU fisheries management partly because it recognises the institutional errors of the past. As the paper points out, the management of European Fisheries has been very poor under the current regime. It has not resulted in a sustainable fishery with fleets of suitable capacity for the fish available. It has not resulted in a set of simple, flexible and effective rules that fishing communities generally support. Instead it has resulted in a "them and us" relationship between fishers and fishery scientists/managers.

The five structural failings of European fisheries management (of which the EU is only one component) recognised in the green paper are:

- Fleet overcapacity
- Imprecise objectives leading to poor guidance for implementation
- Short term focus
- Lack of responsibility given to industry
- Lack of political will to ensure compliance.

Fishers v Farmers

Commercial fishing has been a political football and has received perhaps more attention from politicians and the media than it deserves. Fishers are often perceived as detrimental to the environment; greedy and selfish individuals taking advantage of a public resource. It would be easy to say the same about farmers who impose nutrient loads and monocultures on our natural world and expect public utilities to deal with the results. The public concept of a "fisherman" conjures up a romantic image which is of little relevance to the real world of fisheries today and at odds with the poor press that the activity of fishing often garners. In contrast to industrial fishers, artisanal fishers are often envisaged in the mind of the public as farmers of the sea living in a rural idyll. There are many differences between farmers and fishers however. When farmers die or retire, they leave a farm or tenancy behind for their children and usually its worth more than before; land is wealth in many societies and there are laws that developed to protect landowners and (in the UK) the aristocracy; most farmers don't live in exile from their families; if a farmer dies on the job he leaves a legacy; under the current system fishers are often penalised for being too good at their jobs.

Fishers' representatives

Some fishers and fishing communities, particularly those that work in coastal waters from small vessels (the inshore fleets) have been slow to organise themselves into representative bodies. More than likely this is a function of the cost incurred by losing a days fishing, the individual and independent character of fishers and the fact that they are more comfortable on a rolling deck than in a stuffy board room¹. Larger national fisheries organisations that primarily represent the offshore fleet find it difficult to represent the interests of both inshore and offshore fishers. NGOs representing environmentalists and recreational anglers who claim a moral stance² have been far more adept at manipulating the media and lobbying politicians than commercial fishers'

¹ Johnson & Rodmell (2009)

² Despite the fact that several authors have pointed out that angling is a morally questionable activity (e.g. Balon, 2000; de Leeuw, 1996)

organisations. It is likely that this is due in part to the fact that fishers are usually trying to defend their right of access to fisheries or to make a living while NGOs can present themselves as attempting to protect the environment. Recreational fishers need to be part of the management system and should share the cost of management of their resource.

Costs of access for fishers

Throughout the Green Paper there is reference to fishers benefiting from free access to a public resource. There are two points of contention with regard to this sentiment:

- 1) Access to the resource is not free. Fishers have to pay to access it, either in the form of rent to access support or by purchasing specialist (non-malleable) equipment that allows them to exploit it.
- 2) It should not be a public resource it should be owned and controlled by the community that uses it most (as happens on land). In the past when there was little competition for access an absence of tenure was not a problem. Now through the green paper there is the opportunity to create a fair management system of access to these resources.

The cost of fisheries management to the public budget may currently exceed the value of catches in some cases. However, that does not mean that the costs exceed the value of fishing in terms of employment, tourism, supply of local produce, society and stability of rural communities. One solution to this problem could be to enhance the value of fish landed. Over the years, the prices merchants have been able to charge to their customers have increased, while often the price given to the fisher has remained static.

Maximum Sustainable Yield - a discredited measure

One disturbing feature of the Green Paper is its repeated mention of an entirely discredited concept, that of the Maximum Sustainable Yield (MSY). This has also been referred to by conservation ecologists as the 'Erroneous Equilibrium Paradigm'. It makes the assumption that populations are essentially stable and automatically return to a particular level after having been challenged. It imparts the assumption in fisheries managers and policy makers that when a population collapses it is a result of a natural or anthropogenic crises that then requires that the fishing industry receives support or is penalised until the fishery recovers. In reality the population collapse or boom is likely to be a natural phenomenon and the fishing industry and its management regime needs to re-adapt to that fact rather than strive to impose simplistic wishful thinking upon complex ecosystems. As early as 1983 it was³ pointed out very few fish populations appeared to behave logistically; most are either cyclic, irregular or sporadic, each requiring a different management approach.

Sometimes the variable nature of a fish population may not be evident until several decades of data have been collected. This may exceed the career of a manger responsible for a particular fishery and is likely to be a particular problem where fishers are diversifying their target species in response to variations in staple populations or capture methods in response to varying legislation. In the EU region we have the particular complication that many fishers target mixed species and that each of those species is likely to be following a different population trajectory such that it will be impossible to apply a totally allowable catch for each that will make any sense.

³ Caddy & Gulland (1983)

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The MSY by Larkin (1977)⁴

Here lies the concept, MSY It advocated yields too high And did not spell out how to slice the pie

We bury it with the best of wishes Especially on behalf of fishes

We don't know what will take its place But hope it's as good for the human race

⁴ Larkin (1977)

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The way forward for the Common Fisheries Policy

Assessing management success

It is critical to the integrity and success of the new CFP that fishery specific and credible measures of the status of local stocks are found. There are a variety of approaches that could be taken. For some fisheries the average age or size of fish captured could be a guide. If caught fish dropped below a particular age/size then it would be clear that measures to reduce fishing impact would be required. Such simple measures are unlikely to be suitable for all fisheries, especially those that have a significant degree of temporal or spatial heterogeneity. In the case of a variety of complex local fisheries it is unlikely that any broad brush approach to its assessment is likely to be appropriate, MSY or otherwise. Perhaps the term "Maximum Sensible Yield (MsY)" could be considered as an alternative and as a proxy for a variety of other methods.

Discards

It is critical to the integrity and success of the new CFP that the practice of discarding dead animals rather than landing them ceases as soon as possible. Apart from the obvious fact that this practice is wasteful and results in the pointless culling of marketable fish it may be having other impacts on the ecology of the EU region. In Maine it has been estimated that 40% of the diet of lobsters in that area and fishery may come from dead fish discarded and used as bait by the trap fishery⁵.

The public perception that fishers are dumping fish in order to comply with regulations does nothing for the industry, perceptions of the EU or the relationship between fishers and fisheries managers. Discards are used by anti-Europeans in the same sentence as "straight bananas" as an example of how EU bureaucracy is damaging to national interests. Only fisheries have legislation in place that result in fishers being prosecuted for doing their job too well or forces them to contribute to ecological damage in order to avoid prosecution.

Transparency and equity

It is essential that understandable, rules and regulations are applied sensibly and fairly across the EU. Building in too much flexibility could be abused by states and by fishers and is likely to result in high effort levels and resistance to new technical measures. Regulations for the small-scale sector, where fishers have a restricted geographical range and use traditional fishing methods and vessels, should allow flexibility on what they target (without the current bureaucratic burden). It should be recognised that bureaucratic burden has a cost to fishers that they must then deal with, by either reducing their profit margins or by catching more fish. Simple and robust legislation that makes sense to the fishers will be cheaper to implement and is likely to attract better compliance from fishers. Some fisheries legislation currently in force is so complex that even legal experts have trouble understanding it – and the need to employ legal experts on both sides results in more cost to the industry.

Socio-ecological not short-term economic

It is critical to the integrity and success of the new CFP that the policy recognises the fundamental triangular rule of thumb that applies generally in natural sciences; you can usually only satisfy two

⁵ Saila et al (2002)

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points of a triangle⁶. The previous CFP probably leant towards a Social-Economic scenario. Given that most of the EU fleet is under 12 meters⁷ and tied to particular ports and fishing grounds but, most small-scale fishers would probably prefer a Social-Ecological scenario.



The pain felt as a consequence of management measures and subsequent change should be proportional to the impact on the environment that particular groups impose. For smaller boats, reductions in effort could be achieved by simple methods such as banning fishing at weekends⁸ such as occurs naturally in some fisheries⁹. Effort could be further reduced by differentiating between those that really are embedded in local communities as small scale fishers and individuals that have recently funded entry to this fishery by transferring from industrial to small scale fishing (e.g. through previous scrapping schemes).

Community Transferrable Quota (CTQ)

If transferrable rights were to be introduced they could be implemented at the level of the individual, at the level of fishing communities or at the level of fishers' organisations. For inshore and small-scale fisheries, transferrable rights should have a local specification based largely on historical precedent. Those fishers who have fished historically but have not necessarily had to record their efforts until recently should be given the respect and the rights they are entitled to, and

⁸ Ben-Yami (2009)

⁶ Hart & Johnson (2005)

⁷ O'Riordan (2009)

⁹ Jennings et al (2001)

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not considered to be a zero value because the framework for their inclusion was not present previously. The definition of an inshore or small-scale fisher could be "someone that generally sleeps at home¹⁰" but should be precisely defined locally. If fishers in a particular region of the EU were identifiable by the colour of their skin they would probably be granted indigenous rights. Many fishing families have been working in their local areas for hundreds of years and should have a right to the same sort of protection as might be granted to Eskimos, Native American Indians or Aborigines. It is important that catch shares are owned by people that work as fishers and will continue to work the fisheries, rather than speculators seeking to make money out of the potential value of the opportunity to fish. "Slipper skippers" or "Armchair fishermen" have caused considerable damage to and conflict amongst the fishing community on the NE coast of England. Speculators could drive out local fishers that are in the industry for the long term¹¹.

Involvement of fishers in management should be deep

Objectives of particular fisheries should be set by the fishers that work that fishery. Fishers should act as monitors and managers of their resources. It should be up to the fishers involved to pick appropriate markers/targets for a particular fishery. They are the closest ones to it, who understand it best and with suitable scientific support can fine tune their activities to compensate for local conditions. It is unlikely that there is any one single solution to the need to reduce effort – each community or fishers organisation should come up with its own based upon a common framework provided by the EU and supported by national government.



A proposed scheme for the relationship between fishers and enforcement agencies under the premise that fishers have responsibility for managing stocks.

The cost of management should also be borne by the fishing industry at the most appropriate level. Regional Advisory Councils (RAC) are a good idea as umbrella organisations and could perhaps adjudicate in areas of conflict but would be of limited value for day to day management of particular local fisheries. Management should primarily be by those that live and fish in an area – the smaller the management unit the better¹². Safeguards should be implemented where several usergroups exploit the same stock or habitat. There are examples of where groups of fishers have come to

¹⁰ Colin Wheatley, pers. com.

¹¹ Bogason (2009)

¹² Townsend et al (2008), Ostrom (2006)

informal arrangements over access to areas (e.g. the Informal Potting Agreement in the South of England¹³).

Due to the structure of the EU, fishers are sometimes able to work in the waters of other member states and fish there without the requirement to comply with local by-laws. One example of this is the fact that non-UK fishers are not required to comply with lobster V-notch legislation off the Yorkshire coast. Local fishers cannot land v-notched lobsters without penalty yet foreign fishers can. This practice undermines the v-notching programme (which includes voluntary v-notching¹⁴) and fosters resentment amongst local fishers.

Fishers and fishers' organisations that can demonstrate they are maintaining or heading towards forming a sustainable fishery should have access to an innovation scheme/fund, that incentivises collaboration on a range of problems. For the fishers/organisations that may struggle in achieving their objectives, funding should be made available to help supplement research and capacity building for local management.

If fishers have "ownership" of the resource then they are more likely to provide more reliable catch information, especially if doing so reduces the costs to them that may be imposed by the management organisation seeking information. One of the elements crucial to successful fisheries management is data quality. The new CFP needs to raise the standards of data used to make informed and objective decisions that will have wide ranging impacts upon the all elements of the fisheries world. The ecology, society and the economic potential of fishing regions are intrinsically linked and better data and data standards will allow much better management. At present, apart from Local Ecological Knowledge (which is often ignored), there is a critical lack of useable information for the small-scale inshore and recreational fisheries. The crux of the current problem for fisheries managers (whether they are scientists, policy makers/enforcers or even fishers), is that there is often too little appropriate information available. This can lead to inaccurate fish stock and ecosystem status assessment, which could lead to immeasurable damage to both target stocks and the wider ecosystem as well as the livelihoods of the fishers and the communities they support.

Maximise resilience and employment

The new CFP should seek to maximise resilience and employment in the fishing industry, its associated industries and communities, rather than direct profit and catch biomass. Increased profit inevitably leads to increased investment and the ratchet effect as fishers improve the efficiency of their boats with little thought for quality or price as quantity is the key determinant of income. It is only with increased certainty that fishers will reduce discount rates and accept reduced profit margins. Because they are critical with regard to price it is crucial that merchants are included in the CFP and that they also seek to enhance quality rather than quantity. If they are not part of the system they are unlikely to support anything that increases prices to them. Grants should be made available to fishers and communities to encourage direct marketing of premium quality produce and to improve branding and traceability of landings. Inshore and locally caught fish will be a stronger product if labelled as such. Imposing traceability will result in some increase in cost but this may serve to improve the view of fish as a quality product.

¹³ Pitcher et al (1998)

¹⁴ Rodmell et al, in prep

In local inshore waters sole access rights should be for locally resident inshore fishers and management should be by geographical area. Fishers should work out what advice they require and as part of the management arrangement should be responsible for bearing part of the cost. It could be argued that a substantial portion of the cost should be borne by the taxpayer as a healthy coastal ecosystem could be seen as a public benefit along with the obvious benefits of sustainable fresh protein being sourced from within the community's own resources. Inshore management should be based on geographical rights to fish a particular area while offshore management should consist of effort restrictions, technical measures and a coastal investment scheme that allows local coastal communities in close proximity to the resources targeted by the offshore fleet to charge a percentage of the total landed catch for the fleet harvesting their resources.

Exports and Imports

Ideally all fish landed in the EU should come from sustainable (or sensible) sources – both inside and outside of the region. Taking imports from external states, especially when they are the result of exploitation by transplanted effort from the EU serves to make the EU appear hypocritical if it tries to encourage sustainable fishing elsewhere and results in indigenous fisheries failing because they cannot compete with modern European fleets. The EU should tariff non-EU fish imports as they undermine sustainable fishing activities where they are caught. Importing fish from areas where fishing is poorly managed is unethical and could result in the deprivation of people who depend upon the sea as a source of protein and who have little alternative to fishing, both within the EU community and those without of it. Export of fish from the EU should also be discouraged, as exports imply excess, and excess is not compatible with sustainability – limitations on imports may serve to assist with this.

Tourism is not the answer

At several points in the Green Paper it is indicated that there is a desire to diversify the sources of income available to fishing and coastal communities. The suggestion that tourism can replace fishing to any degree is fanciful. The general experience of tourism is that it encourages the development of seasonal unskilled jobs for transient workers and a low wage culture. The presence of a working fishing fleet in many rural ports is critical to the identity and ambiance and attractiveness of them to visitors. Trying to replace fishers with something else would probably be counter-productive in many cases. The presence of a healthy inshore/small scale fishing fleet in rural harbours is probably the most effective direct and indirect tourist attraction in many rural coastal areas. This issue is poorly understood or studied despite the capital that rural fishing settlements generally make out of fisheries related imagery for tourism brochures. In recent years larger boats have become addicted to employing people from outside fishing communities on low wages rather than on a share of the catch as have been the historical practice in many fisheries. This has the effect of artificially deflating costs of catching fish and allows boats that would otherwise be unsustainable to continue fishing.

Reseeding programmes – completing the circle

Aquaculture is also put forward as part of the solution proposed in the green paper. It may be that reseeding programmes should be viewed as aquaculture and as a way of giving fishers tenure over areas of the sea bed. Legal and technical support should be given to fishing communities that are seeking to enhance their target stocks by habitat management and by release/recapture

methodologies. Under such a system they develop more responsibility for the area as they complete the circle rather than just harvest what nature produces¹⁵.

There is a need for research into the development of sustainable reseeding techniques for some species in order to develop ranching operations that could support small-scale fisheries. This approach has already met with some success (lobster and scallops) but there is a need to develop small-scale hatcheries and cultivation methodologies that can be operated by fishers. Research should be viewed as marine research rather than just fisheries research. Fishery systems are an integral part of the wider ecosystem – the separation between academic marine research and applied fishery research is purely anthropogenic in the making. Inshore habitats, most used by small-scale fishers, are often vulnerable and require extensive investigation from the intertidal zone, through the shallow sub-littoral to the marine environment proper. Ecological research and questions based on the collection of field data has gone out of fashion in recent years as evolutionary ecology and computer modelling has come to the fore but there is a real need for traditional approaches to generate a better understanding of basic features of coastal habitats and inhabitants.

Understanding the social science of fishing organisations and communities

Understanding prosecuted species is only one facet of what is required. There also needs to be far more effort put into understanding how fishing communities work (or don't) and what management approaches are likely to be successful in various circumstances. It is as important that those that are being managed have some understanding of the issues from the manager and policy-makers point of view. There are currently a variety of training courses that fishers are required to complete in order to be licensed (e.g. Health and Safety, Sea Survival, Care of the Catch, VHF Radio operation) perhaps some consideration should be given to making a course in basic fisheries management for fishers a prerequisite.

It is generally recognised that fisheries management institutions are under-resourced with regard to their understanding and incorporation of social sciencesinto plans and policies. This was recognised in a recent internal review of DEFRA in the UK¹⁶ and has been commented on by numerous authors as an international problem¹⁷. There are few social scientists, psychologists or anthropologists employed by governmental institutions responsible for fisheries management. The new CFP should make some effort to encourage consideration of these aspects in local fisheries policy and management. Some excellent work has been carried out reviewing what works in common pool management systems that have endured¹⁸ (see page 14).

Reacting to change

Without exception, all fisheries that are within the EU boundaries have and will continue to experience natural and anthropogenic change in fishing societies, stocks, legislation, techniques and effort. Climate change in particular may lead to rapid changes in species numbers and distributions in the Eurozone. It is often assumed that the impacts of climate change are going to be entirely negative with respect to fish stocks in the EU region. However history shows us that climate change

¹⁵ Townsend et al (2008)

¹⁶ SAC Secretariat (2007)

¹⁷ e.g. McGoodwin (1990)

¹⁸ Ostrom (2006), Townsend et al (2008)

can boost some stocks quite significantly, e.g. the Gadoid outburst in the North Sea and recent rises in velvet crab numbers off the east coast of England.

Management regimes should be set up so that they can match the rate of change of all components of fisheries. With this in mind, and the lessons learned from the abject failure of centralised management, the reformed CFP should put innovation and collective management at its core. Reacting to and resolving new marine/fisheries challenges as they become apparent to those that are fishing rather than after they have percolated through a bureaucratic lag will hopefully ensure that the vision illustrated at the beginning of the green paper is approached and that there is no need for sweeping changes of EU fisheries management policy in 10-15 years time.

Elinor Ostrom's design principles for common pool resources¹⁹

(adapted for fishing)

- 1. Fishers should have clearly defined rights to extract fish from particular areas.
- 2. The costs of fishing should be congruent with the amount that can be earned.
- 3. Fishers should be able to modify rules and regulations.
- 4. Fisheries enforcement agencies should be responsible to the fishers.
- 5. Violations of fisheries rules should be punished in accordance with the severity of the breach.
- 6. Fishers should have access to cheap and efficient conflict resolution mechanisms
- 7. Fishers should be encouraged to form local organisations

¹⁹ Adapted from Ostrom (2006)

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