SEAS AT RISK

Moving towards low impact fisheries in Europe: policy hurdles and actions

Executive Summary

December 2009

Explanatory note

European fisheries are currently unsustainable. The European fleet has great impacts on the environment, both directly (by removal of biomass and impacts on habitats, for example) and indirectly (through emissions of greenhouse gases). The process of reform of the Common Fisheries Policy poses a precious opportunity to address the environmental impacts of fishing fleets in European waters and beyond.

Seas At Risk is convinced that the reform of the CFP provides a much-needed opportunity to promote a transition to low impact fisheries in Europe. For that reason, Seas At Risk has commissioned a report on the impacts of different gears and fishing methods, on the hurdles faced by fishermen who wish to shift to low impact gears and techniques, and on policy proposals for the promotion of climate friendly, low impact fisheries.

The report "Moving towards low impact fisheries in Europe: policy hurdles and actions" was written by Dr. Jo Gascoigne and Edward Willsteed, of MacAlister, Elliott and Partners. Seas At Risk would like to use the opportunity posed by the public consultation on the reform of the CFP to put forward some ideas on what kind of fleet would be desirable and what policy action can be taken to achieve such a fleet in Europe, by submitting the executive summary of the report to the consultation process. The full report will be available at Seas At Risk's website shortly.

Executive Summary

1. Introduction

Fisheries have impacts on the marine environment other than those that arise from the removal of a proportion of the population of the target species. These may be direct, such as impacts on marine populations or habitats from unselective gear, destruction of the seabed or interactions with rare or endangered species. Fishing impacts may also be indirect, for example contributing to climate change via the carbon emissions of fishing vessels.

In this report, we i) rank EU fishing fleets according to their direct and indirect environmental impacts (as far as possible), from most to least environmentally damaging; ii) consider the hurdles that fishermen face in trying to switch from an environmentally damaging fishing technique to a less damaging one; and iii) consider the policy actions that could be taken at EU, Member State and/or local level to reduce or eliminate some of these hurdles.

We analyse the relative impacts of different fishing techniques and fleets using fisheries data published by the European Commission and other published studies. We analyse the hurdles and potential policy actions using a series of 19 case studies taken from fisheries operated by European Union Member States. Information for the case studies was gathered either from published sources or from interviews with people in or close to the industry. Due to the sensitive nature of some of the information presented in the case studies we are obliged to keep sources anonymous where anonymity was requested, however as much information is provided as possible.

2. Part 1 – Analysis of environmental impacts by gear and fleet

The European Commission categorises fishing gears into three groups: towed, mobile and passive. Towed gears include all types of trawls and dredges. Passive gears (also known as 'fixed' gears) include fixed or drifting gillnets and trammel nets, fixed or drifting longlines and handlines. Mobile gears (intermediate between passive and towed) include seines, towed longlines and trolling lines. In terms of vessel numbers, the most commonly used gears in the EU are passive gears (fixed gillnets and trammel nets). In terms of total vessel tonnage or power, the most commonly used gear is towed – the demersal otter trawl.

We first consider direct environmental impacts. It is clear that different types of gear will have different types of impact – selectivity, by-catch, habitat impacts and impacts on vulnerable species vary a great deal by gear. Gears that rank highly for one type of impact may rank low for another. We assessed gears according to these four types of impact (using a series of published studies) to produce a ranking according to the type of fishery. For pelagic fisheries, drifting gillnets were considered the

most damaging, particularly in terms of their impacts on vulnerable species. Lines were considered the most environmentally friendly option for pelagic fisheries, while midwater trawls and purse seines were intermediate. For demersal fisheries, dredging and beam trawling were considered to have the highest impact, followed by other demersal trawls, then nets. Again, lines were considered the best option to minimise direct environmental impacts.

Secondly we consider carbon emissions. We found it much more difficult to rank gears by carbon emissions. An important consideration is whether carbon emissions are assessed per unit weight of catch or per unit value (i.e. per kg or per euro). If they were calculated per unit weight, high-volume fisheries (usually fisheries for small pelagic species) tended to rank high – however we note that the produce of these fisheries is usually processed into fish meal to produce other types of animal protein – if the emissions per unit weight of the final product were considered, doubtless these fisheries would perform a lot less well. If carbon emissions are calculated per unit value of catch, fisheries for very high value species tend to perform best.

It was, however, possible to draw general conclusions from this analysis, if tentatively, as follows: i) generally demersal trawl fisheries and offshore longline fisheries both performed badly in terms of emissions per unit catch; ii) towed and mobile gears generally performed worse than passive gears; iii) with some exceptions, small vessels performed better than medium-sized vessels – however there was no evidence that medium-sized vessels performed better than large vessels (but data was sparse for this comparison); iv) depleted, poorly managed stocks led to higher emissions per unit of catch. The most striking result from our analysis, however, was the high and unexplained variability between fleets and Member States.

3. Part 2 – Analysis of hurdles to reducing environmental impacts

We identify three types of changes that could be made to reduce environmental impacts in a fishery: i) technical changes to vessel or gear that do not involve significant changes to the nature of the fishery (gear type, target species and area of operation); ii) changes to the gear type used by the fishery; and iii) changes at the level of whole fisheries – i.e. promoting some fisheries and eliminating others.

For technical changes (9 case studies), the major hurdles to change were not specifically related to public policy, but instead were i) technical; ii) financial and iii) lack of knowledge. Particularly for carbon emission impacts, it was clear that some vessels and fleets operated much closer to best practice than others, and that most fishermen were aware of some but not all of the possible innovations. For direct impacts, changes (mainly involving adaptations of gear) had variable and sometimes unpredictable impacts on different sectors of the fleet.

For changes in gear type (6 case studies) hurdles were more significant and more likely to be related to the policy and regulatory environments. These included i) inflexibility in the management system (particularly related to quotas – different gear types produce a different spectrum of by-catch, for which a fishing operation may not have a right to quota); ii) gear conflicts (passive gear cannot be used where a lot of towed gear is in operation); iii) reduction in total catch ('good' gears often catch less than 'bad' gears – particularly where trawls are substituted for other gears); iv) unforeseen environmental impacts of the new gear type. The hurdles identified above for technical changes (knowledge, technical ability and cost) also applied even more strongly to these changes.

For wider changes in fisheries (3 case studies) we consider fisheries that might be considered 'benign' and 'malign'. Few serious attempts have been made to eliminate very high-impact fisheries and we note a tendency instead to export them to third countries or other management regimes. It might be easier in policy terms to support benign fisheries – from our analysis it appears that mussel fisheries probably fall in this category having low carbon emissions per unit of catch and, in the main, low direct environmental impacts.

4. Part 3 – Analysis of policy actions to support change

From the above case studies, we also identified policy actions that may reduce or remove some of the hurdles to change in EU fisheries. These are presented below:

- Decision-making by policy makers should be transparent and should follow stated EU policy (e.g. no subsidies which increase capacity, fisheries management according to the precautionary approach). This should apply to EU fisheries policy both inside and outside the EU. The information that supports management should likewise be public.
- It is clear that fisheries targeting well-managed stocks have lower environmental impacts, both direct and carbon-related. Where fish are more abundant, it requires less fishing effort to achieve the same volume of catch, therefore resulting in less incidental bycatch, habitat degradation and fuel consumption.
- Good fisheries management involves higher costs, for example to fund the research necessary to make sound decisions and to fund effective enforcement of the decision. Member States should recognise that meeting these costs are vital if fisheries are to result in sustainable economic benefits.
- The sustainable exploitation of depleted fish stocks will only be possible after a temporary (but meaningful) reduction in fishing effort. Further studies linking fish abundance and the economic performance of fishing fleets would be useful, particularly to support decision-makers when facing communities dependent on the economic returns from a depleted stock.
- Involving the fishing industry and other stakeholders in decision-making is vital. The case studies show clearly that the most

innovative ideas for reduction of environmental impacts in fisheries come when policy-makers and the industry work closely together. Dialogue has improved markedly in recently years, but there remains a need to move from consultation to real participation. We note that the small-scale fleet is still largely excluded from this process in many Member States.

- The current regulatory regime micro-manages most fisheries in the EU, and prevents fishermen the flexibility required to innovate. If the management regime were to step back and give fishermen space in which to operate as efficiently as possible, the process of improving the sustainability of fisheries would likely progress more swiftly. This requires that regulators, scientists and other stakeholders have an excellent oversight of the fisheries within their sphere of influence and that stakeholders engage in meaningful dialogue underpinned by mutual respect – this is conspicuously absent in many instances at the present time.
- Hidden subsidies and other perverse incentives that maintain the apparent economic viability of environmentally damaging fishing operations need to be urgently addressed and removed – likewise regulatory obstacles to innovation should be dealt with.
- For technical changes, it would be hugely beneficial to review best practice operations across EU fisheries (or even more widely) followed by a dissemination of information about how fishermen can reduce their carbon emissions and direct environmental impacts. This could usefully take the form of a central data repository that is open to all. Rising fuel prices give fishermen a significant incentive to participate in this process. This process should also reveal the regulatory obstacles to implementation of best practice, which can then be dealt with.
- It may be considered appropriate to provide some kind of support to fishermen in reducing their impacts – this might be in the form of training, technical advice or even loans. However it is extremely important that this support does not provide a de facto subsidy for increasing overall capacity – bearing in mind that if vessels owners can operate more efficiently they will have extra funds to invest in increasing their fishing capacity.
- Balancing policy between fleet sectors: We note above that in general, the small-scale fleet in the EU has lower environmental impacts per unit of catch than the large-scale / offshore fleet. This is because the small-scale fleet has lower carbon emissions and because it tends to use more benign gears. However, from a policy perspective, the large-scale fleet is much easier to deal with: it is easier to engage with, easier to manage, and easier to enforce. Compliance with regulations is therefore higher. Various policy initiatives, such as decommissioning, Regional Advisory Councils, quota distribution, Individual Transferable Quotas and other rights-based systems have tended on balance to favour the large-scale fleet. In particular, we note that the quota distribution system in many (perhaps most) Member States has not been good for the profitability of the small-scale fleet and has in addition led to a significant amount of discarding, high-

grading or landing of 'black fish'. A lower-impact future for EU fisheries will require policy-makers to shift the balance towards the small-scale fleet, making more of an effort to engage with this group and adapting the management system to better reflect their operational requirements.

- Gear conflicts can be eliminated by marine spatial planning – low-impact passive gears can only enter a fishery if they are given room to operate away from towed gears.
- There should be a presumption of zero discarding. At the same time, the management regime needs to adapt to ensure that this is possible for fishermen. For example, if fishermen catch alongside the target species a species for which they do not have quota, their only choice at present is to discard or illegally land the fish. In general, fishermen abhor discarding and, we believe, would be willing to work with policy makers to ensure that a discard ban can be introduced in a coherent way. Converting trash fish to surimi products is a booming industry in Southeast Asia for example.
- Support to improve the quality of the end product will increase income per unit of catch and should make the sector more viable and more sustainable. It is particularly important if EU fisheries are to compete with an influx on to the EU market of cheap tropical farmed fish.

It is clear that revising the CFP to include all these recommendations will not be a straightforward process.