Scientific Highlights

Save the fish: attempts to change European fisheries management

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With three scientific studies and a number of high-level presentations, IFM-GEOMAR contributed to the efforts of rebuilding Europe's fish stocks and putting European fisheries management on a sustainable and profitable path.

The Common Fisheries Policy (CFP) is the European Union's instrument for the management of fisheries, aimed at enhancing the sustainability of fish stocks and the economic competitiveness of the fishing industry. However, neither the living aquatic resources, nor the profits of the fishing industry have benefited from it, with 88% of the stocks being overfished and profit margins of fishermen continuously in decline (EC, 2009) (Figure 1). An ideal fisheries policy should foster the sustainable use of fish stocks, provide for coherent laws and regulations that yield adequate economic incentives, and quarantee consistent enforcement of the legal framework. Furthermore, the regulation scheme ought to be based on transparent rules rather than a discretionary political decision-making process, which may be blurred by short-term interests. In the context of the Kiel Future Ocean Cluster of Excellence, researchers from IFM-GEOMAR, the Kiel Institute for the World Economy, the Walther-Schücking-Institute for International Law, and the Economics Department of the Christian-Albrecht University in Kiel joined forces to explore the biological, economical, legal and political shortcomings that have led to the failure of the CFP. The study was published in *Marine* Policy (Kahlilian et al., 2010) and concluded

that excessive quotas set by the Council of Ministers and payment of direct and indirect subsidies by both the EU and Member States has resulted in too much fishing effort and excessive exploitation rates, resulting in low stock sizes, low catches and severely disturbed ecosystems. From a legal perspective, compatibility of the CFP with the EU Treaty in general and the precautionary principle in particular was at least questionable. The lack of transparency of its regulations as well as insufficient control and enforcement of its provisions have added to the failure of the CFP. Short-term political considerations have regularly overruled scientific advice in the decision-making of the Council. Overregulation and contradictory rules have resulted in a low level of acceptance of the CFP.

In a second study (Froese and Proelß, 2010), the researchers evaluated whether Europe would be able to meet the political commitment given at the Development Summit in Johannesburg in 2002, to rebuild its fish stocks latest by 2015. The analysis showed that, if current fishing pressure continues, 91% of the European stocks will remain below target. If European ministers in charge of fisheries were serious about meeting their obligations, they would have to reduce dras-

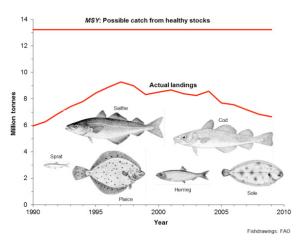


Figure 1: Potential long-term catch and actual landings for 56 major European fish stocks.

tically fishing pressure and halt fishing completely on some stocks. But even if all fishing were halted in 2010, 22% of the stocks were so depleted that they cannot be rebuilt by 2015. The study showed that under a business-as-usual scenario, Europe will miss the 2015 deadline by more than 30 years.

In a third study (Froese et al., 2010), the Kiel researchers teamed up with colleagues from Australia and the USA to design harvest control rules for European fisheries that are economically sound, compliant with international fishery agreements, based on relevant international experiences, supportive of ecosystem-based fisheries management and compatible with the biology of the European fish stocks. They showed that the proposed rules would have prevented the collapse of

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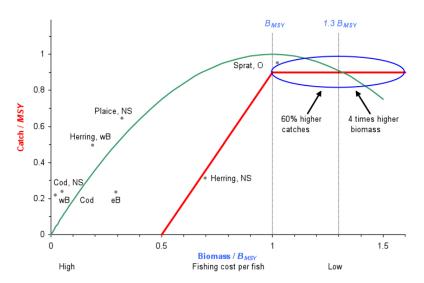


Figure 2: Proposed harvest control rules for European fisheries (red line), stabilizing stock sizes and catches in an area (blue ellipse) where stock biomass will be four times larger and catches 60% higher than currently. The green parabola indicates the generalized relationship between catches and biomass. Stocks above that line will shrink, stocks below that line will grow. NS = North Sea, wB = western Baltic, eB = eastern Baltic.

the North Sea herring in the 1970s and that they could deal with strong cyclic variations in recruitment such as known for blue whiting. Compared to the current CFP system, these rules would lead to higher long-term catches from larger stocks at lower cost and with less adverse environmental impact.

The proposed harvest control rules are shown in Figure 2. They would stabilize stocks at large sizes, 30% above the internationally agreed reference point Bmsy. This is meant to account for uncertainty in stock assessments and for natural fluctuations in stock size. Also, at this stock size, fishing cost per

fish are minimized and profits of the fisheries are maximized, i.e., this is the area of maximum economic yield. Stocks would be on average four-fold larger than now and catches could be increased by about 60%.

The proposed harvest control rules are in stark contrast to an alternative plan considered by the European Commission (ICES, 2010). That plan allows continued fishing on depleted stocks and catches beyond the maximum sustainable yield (MSY). Uncertainty, natural fluctuations or economic optimisation have not been considered. If that plan is adopted, the continuing failure of the Common Fisheries Policy is likely.

The outcomes of these studies were presented to decision makers and stakeholders, including an informal dinner presentation to members of the European Commission, a breakfast meeting with WWF Brussels, a cocktail briefing at the European Parliament, a 'Kamin Abend' in Berlin with members of the German Ministry of Agriculture, a meeting with Fisheries Permanent Representatives in Brussels, an invited presentation at the World Trade Organization in Geneva, a keynote at the BSH Meeresumwelt-Symposium, and a presentation at the Forum Bestandserhaltende Fischerei in Hamburg.

The public was informed through numerous interviews, including dedicated articles in leading news papers and also in Nature News. A Deutsche Welle TV interview was translated into many languages and even made it into YouTube. There were several podium discussions, e.g. at the ATLANTIS Film Festival in Wiesbaden, the OCEAN 2012 event in Hamburg, the End of the Line launch in Frankfurt, and the Global Economic Symposium in Plön, Germany. We hope that these efforts will succeed in shaping the future Common Fisheries Policy and contribute to the rebuilding of European fish stocks and the ecosystems that support them.

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