

Baltic Sea

STATUS AND POTENTIAL PRODUCTIVITY OF FISH STOCKS

September 2017

SUMMARY

To date the European Union is failing the responsible management of fish resources. Despite different international commitments, and EU framework regulations on sustainable fisheries, the status of EU fish stocks is still far from being considered as positive.

A recent study¹ (Froese et al. 2016), commissioned by Oceana provides the largest picture of European fisheries by surveying 397 stocks - more than twice the number currently analysed by the European Commission. Its main findings include that 64% of the stocks were subject to ongoing overfishing and only 12% of the stocks fulfilled the requirement of the CFP (not overfished and biomass above MSY).

Although the situation in the Baltic Sea has been improving in recent years and looks better than the average status of EU stocks, there are still however areas of concern that put reaching the Common Fisheries Policy's (CFP) goal to rebuild stocks to sustainable levels by 2020 in question. Out of 20 stocks analysed in the Froese et al. report:

- 40% of stocks are subject to ongoing overfishing ($F > F_{msy}$)
- 45% of stocks are outside of safe biological limits.
- Only 5 stocks (25%) are in line with the CFP objectives².

But sustainability is also good for the fishing sector. The study concludes that the potential increase in catches should all stocks recover to MSY levels is around 26%. Moreover looking at individual stocks the benefits of recovering the stocks to MSY capable levels cannot be clearer.

When fished sustainably:

- Catches of western Baltic cod can increase by 40 thousand tonnes (331%)
- Catches of eastern Baltic cod can increase by 73 thousand tonnes (168%)
- Catches of pelagic fish (herring and sprat) can increase by 140 thousand tonnes (23%)

40,000

tonnes

of additional catches can be taken from western Baltic cod if it recovers to MSY



SUSTAINABLE MEANS PROFITABLE

The end of overfishing is necessary not only to guarantee the sustainable exploitation of fish resources at present but also for the future in order to recover the profitability and social prosperity of fishing activities. EU Member States must therefore ensure that TACs are in line with scientific advice and guarantee stocks are above biomass levels that are able to provide the highest long-term average catch (MSY).

THE BALTIC SEA

The Baltic Sea is one of the largest brackish water seas in the world and due to its unique conditions it is a highly stressful environment for most marine organisms. Only a limited number of species have successfully colonized it and number of commercially exploited species is much lower than in the neighbouring North Sea.

The Baltic Sea is enclosed from all directions, surrounded by nine countries (Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, The Russian Federation, and Sweden) and connected to the North Sea by a number of smaller Danish straits.



Cod, herring and sprat account for 95% of total catches in the Baltic Sea

Recovering cod should be a top priority for its environmental and commercial importance

Fisheries

Commercial fishing in the Baltic Sea has a long tradition in all surrounding countries but target only a handful of stocks.

The main species targeted in the commercial fisheries in the Baltic Sea are cod, herring, and sprat, which together account for about 95% of the total catch. The pelagic fisheries, which account for the largest catches (by weight) in the region are the mid-water trawl fisheries for sprat and for herring. The most important demersal fisheries are the bottom-trawl fisheries for cod and flatfish³. In recent years, the most important species landed in weight included herring (representing 51% of the landed weight) and sprat (38% of the landed weight), followed by cod and flounder. The pelagic species (sprat and herring) also generate the highest value due to the volume of landings⁴.

Cod is a highly important fish species in the Baltic, both environmentally and commercially, and in the past it used to generate majority of value. It is also highly important for many small-scale fishermen and its recovery should be a top priority for decision makers and stakeholders.

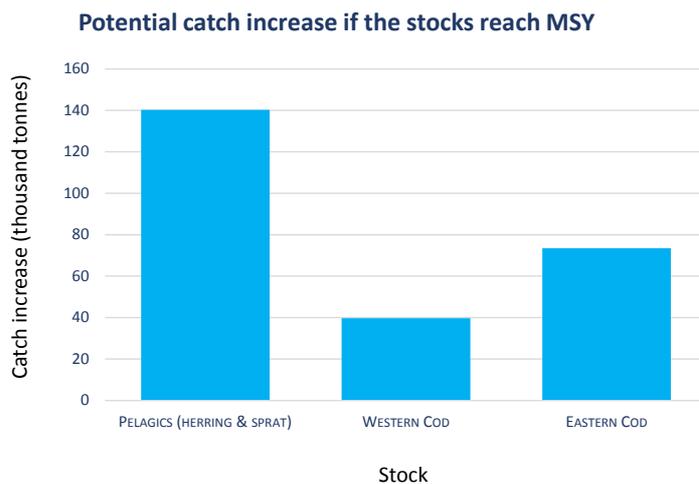
BALTIC SEA STATUS AND RECOVERY SCENARIO

To get the full picture of European fisheries, including the Baltic Sea fisheries, Oceana commissioned the most comprehensive scientific study ever made on the status of European fish stocks and their potential productivity if sustainably managed. The findings of this independent study confirms that only a minority of European stocks can be considered as well managed, and although there is serious cause for concern about the current state of fish stocks, the potential of stock recovery is huge.

In order to fulfil the legally binding commitments of the CFP to recover fish stocks above healthy levels by 2020 annual catch limits must be set consistent with scientific advice. In many instances it means immediate but temporary cuts to the total allowable catches and as a result short-term losses for the industry. This is often the main argument against following scientific advice used by both the industry and decision makers.

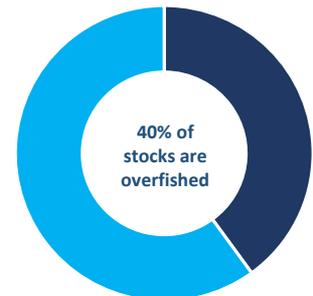
The GEOMAR study conveys an optimistic message however - rebuilding of biomass above the MSY level would require only a few years in most stocks. Depending on the depletion level exploitation at half the MSY-level would rebuild most stocks in the northern ecoregions in only 1-5 years⁵.

Even though Baltic Sea looks better than the average status of the EU stocks, out of 20 stocks analysed nearly half (40%) are subject to ongoing overfishing ($F > F_{msy}$) and 45% are outside of safe biological limits. Only 5 stocks (25%) are in line with the CFP objectives⁶.



There is however a lot of room for improvement. Currently the total biomass of the 20 analysed stocks of 3 million tonnes in 2015 was well below the potential biomass level of 4 million tonnes that can produce maximum yields. Total recorded catches of 685 thousand tonnes were also below the summed maximum sustainable yield of 958 thousand tonnes. Because of trophic interactions it is not possible to achieve MSY simultaneously for all stocks, but sustained catches of near the lower confidence limit or near 90% of MSY (whichever is lower) would be possible if all stocks have recovered above B_{msy} . Because of more fish in the water, such catches could be obtained with much less fishing effort and much less impact on the ecosystem⁷.

Baltic Sea stocks exploitation status



- Stocks overfished
- Stocks sustainably exploited

UP TO 26% MORE FISH

In summary the potential increase in catches should all stocks recover to MSY levels is around 26%.

Moreover looking at individual stocks the benefits of recovering the stocks to MSY capable levels cannot be clearer.

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OCEANA'S RECOMMENDATIONS

Based on conclusions of Dr. Froese's study, Oceana recommends to recover EU fisheries by:

- Setting catch limits for fish stocks consistent with scientific advice to recover fish stocks above healthy levels by 2020 the latest.
- Set a TACs for the western and eastern Baltic cod stocks that ensure long-term recovery.
 - Oceana recommends that TAC in 2018 for western cod stock in subdivisions 22-24 should not exceed 1,376 tonnes.
 - Oceana recommends that TAC in 2018 for eastern cod stock in subdivisions 25-32 should not exceed 24,767 tonnes.
- Moreover, Oceana does not support quota transfer from eastern Baltic cod TAC to the western Baltic cod TAC. It is impossible to determine with full confidence which fish is being caught even despite evidence of both stocks mixing in areas 24 and 25. The transfer may cause additional stress (increased fishing mortality) on a fragile western stock.
- All directed sprat fisheries in subdivision 25 should stop and fishing efforts redistributed to other areas to allow cod stocks to recover.
- Improving the selectivity of fishing gears in order to protect fish juveniles.

Oceana supports these guidelines and emphasises the urgent need to follow the ICES MSY framework, as a commitment to reduce overfishing and as an intermediate step towards rebuilding fish stocks to their most productive levels.

Oceana further encourages the Commission and Member States to incorporate more species into the Baltic Sea TAC regime, starting with those for which ICES has already provided scientific advice on stock status and recommended catch limits.

Finally, Oceana considers that the allocation of fishing opportunities should give priority to fishermen who apply the most environmentally sound practices, thus rewarding fishing methods that are the most selective and least destructive to the environment.

A HUGE POTENTIAL

A recovery and well managed scenario, in line with the legal requirements, has the potential to drastically change the status of the Baltic Sea fisheries leading to a significant increase of the sustainable catches in the region by 26%, with the correspondent positive consequences to the fishing sector.

REFERENCES

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- 2 Idem, p. 18
- 3 ICES Fisheries Overviews. Baltic Sea Ecoregion. Published 4 July 2017
- 4 Scientific, Technical and Economic Committee for Fisheries (STECF) – The 2016 Annual Economic Report on the EU Fishing Fleet (STECF 16-11); Publications Office of the European Union, Luxembourg; ; ISBN 978-92-79-64633-1; doi:10.2788/842673
- 5 Froese et al.
- 6 Froese et al., p. 18
- 7 Froese et al.



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