

Restoring Ecological Balance as a Priority for the Reform of the Common Fisheries Policy

Polish Parliament (Sejm)

Warsaw, 13 March 2012

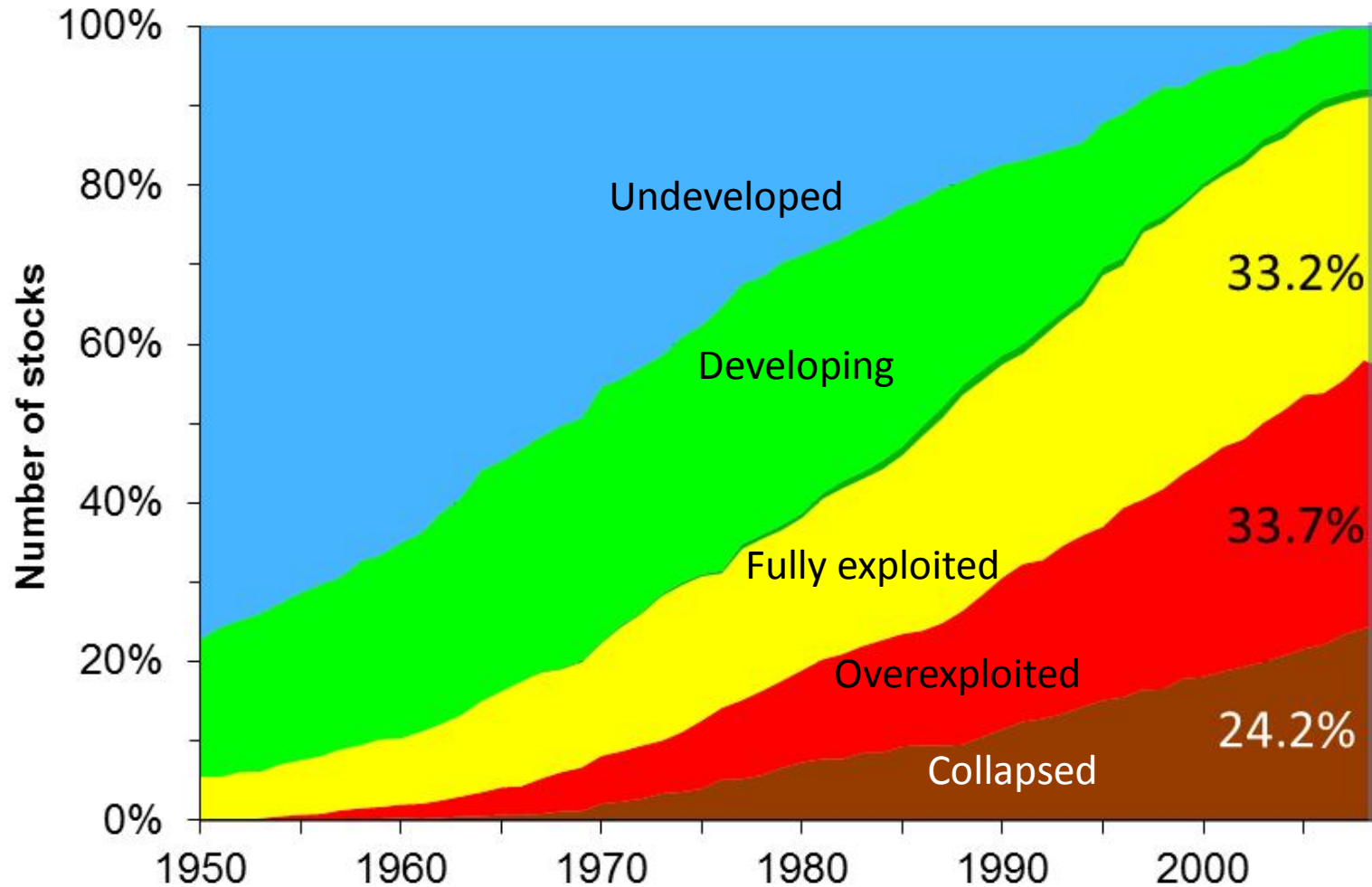
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Overview

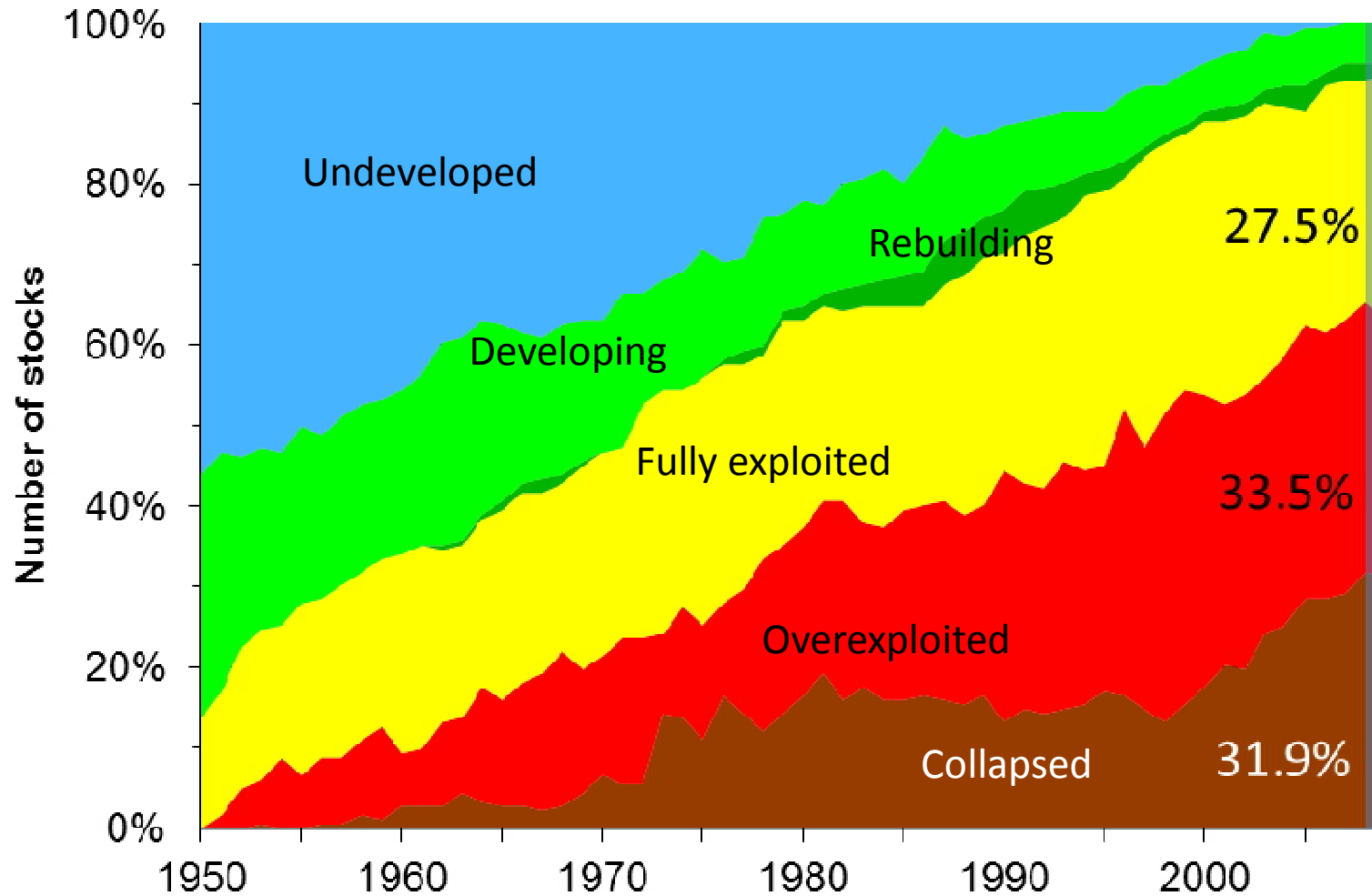
- Global status of fisheries
- European status of fisheries
- Four terms
- Legal background
- ‚Make-or-break‘ issues with the CFP reform

Global Status of Fish Stocks



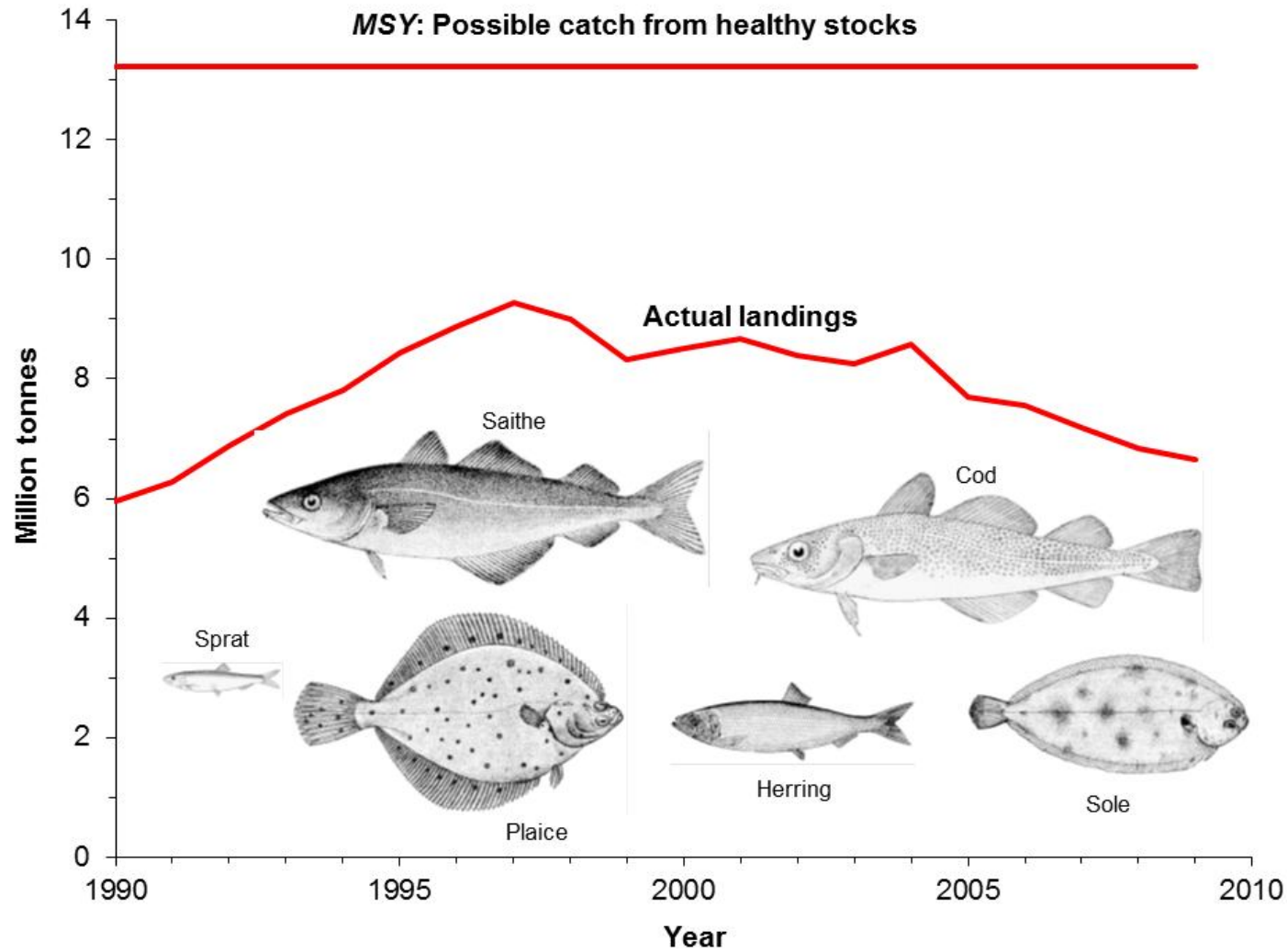
Analysis of FAO global catch data of 1950 – 2009
for 1,954 nominal stocks
(Froese et al., *Marine Biology* 2012)

Status of European Fish Stocks

















Analysis of FAO catch data for 182 nominal stocks in the Northeast Atlantic, 1950 – 2009 (Froese et al., *Marine Biology* 2012)

Status of European Fish Stocks



Actual and potential catch from 56 stocks in northern European waters Fishdrawings: FAO

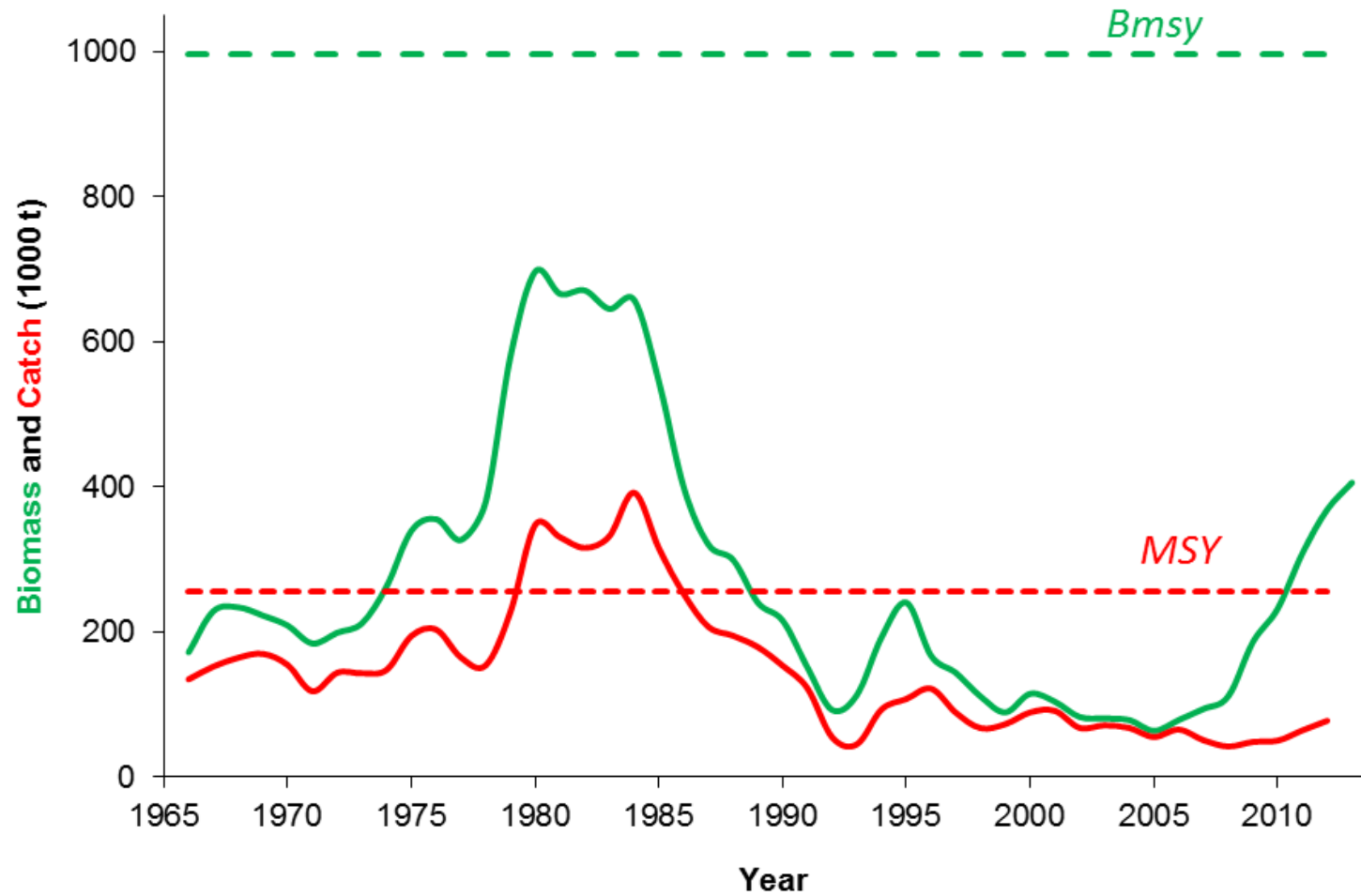
How are the Baltic Stocks?

Cod in 22–24	Above target 	Undefined 	Above trigger 	Full capacity 	reproductive landings of 16.6 kt in 2012
Cod in 25–32	Appropriate 	Harvested sustainably 	Undefined 	Undefined 	landings of 90 kt in 2012
Herring in IIIa and 22–24	Above target 	Undefined 	Below trigger 	Undefined 	catches in 2012 should be no more than 42 700 t
Herring in 25–29 (excl GoR) and 32	Above target 	Harvested unsustainably 	Undefined 	Undefined 	catches in 2012 should be no more than 92 kt
Herring in the Gulf of Riga	Above target 	Harvested unsustainably 	Above trigger 	Undefined 	catches in 2012 should be no more than 25 500 t
Herring in 30	Appropriate 	Harvested sustainably 	Above trigger 	Full capacity 	reproductive catch in 2012 should be no more than 104 kt
Herring in 31	Unknown 	Unknown 	Unknown 	Unknown 	-
Sprat in 22–32	Above target 	Harvested unsustainably 	Undefined 	Undefined 	that catches in 2012 should be no more than 242 kt

Four Terms

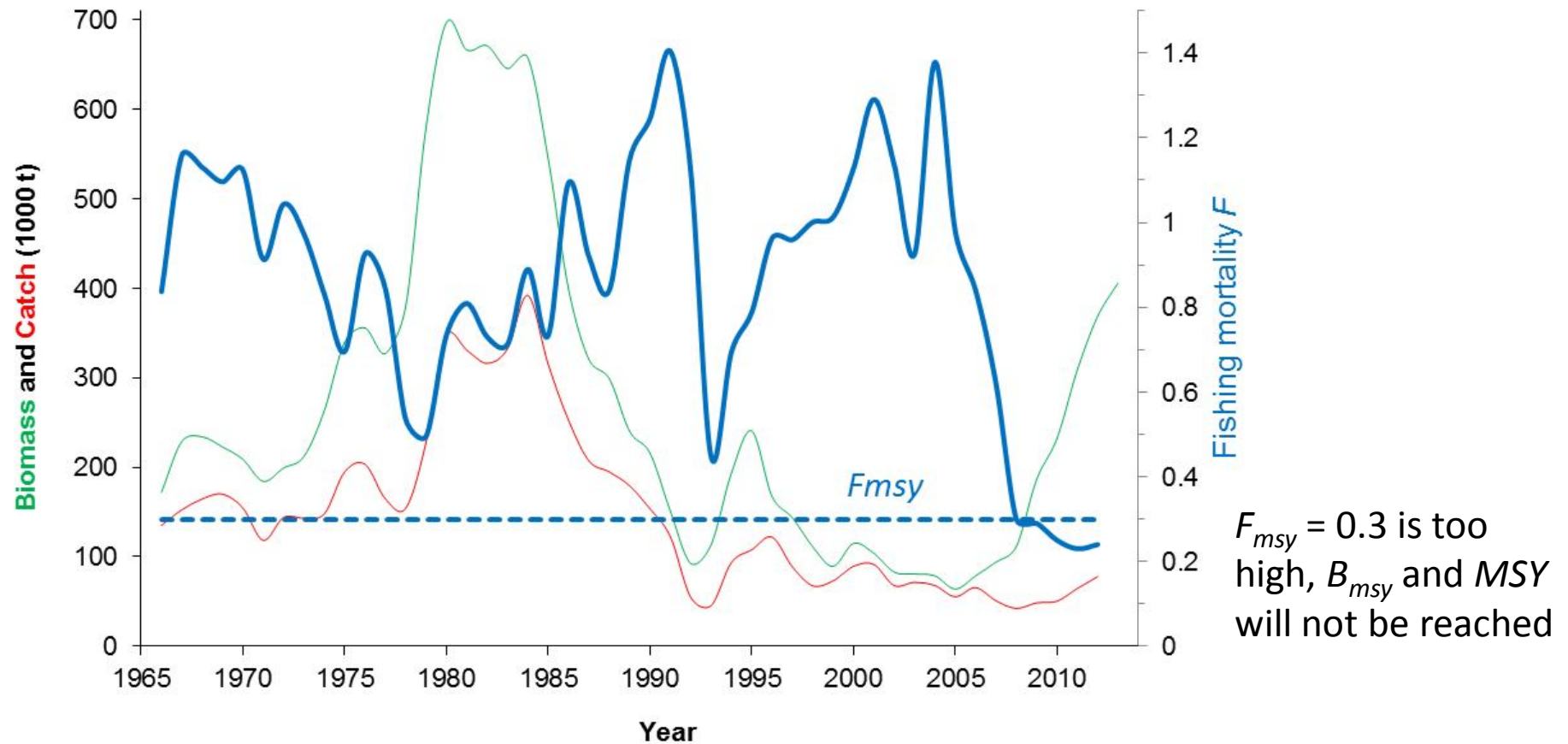
- **Biomass (B)** is the body-weight of all fish in the water
- **MSY** is the **M**aximum **S**ustainable **Y**ield that can be taken from a population (=stock) of fish indefinitely
- **B_{msy}** is the **biomass** that a fish stock must have, so that it can deliver the maximum sustainable yield **MSY**
- **F_{msy}** is the fishing pressure (the proportion of fish killed by fishing) resulting in **B_{msy}**

Biomass and Catch of Eastern Baltic Cod



If the 15% rule is maintained, stock, catches and profits will continue to increase

Fishing mortality of Eastern Baltic Cod



Legal Background of Fishing

- The Law of the Sea (UNCLOS 1982), in force since 1994, requires countries to maintain stocks in their EEZ such that they can produce *MSY*
- The precautionary principle is contained in the EU-Treaty. It requires that in case of uncertainty, the less dangerous margin of error has to be used as target. This is explicitly applicable to the use of natural resources.
- UNFSA (1995) clarifies that after recovery, F has to be smaller than F_{msy} .
- So far, UNCLOS and UNFSA have been implemented by New Zealand, Australia and the USA.

Why is a Proper Implementation of the *MSY*-Concept of Global Importance?

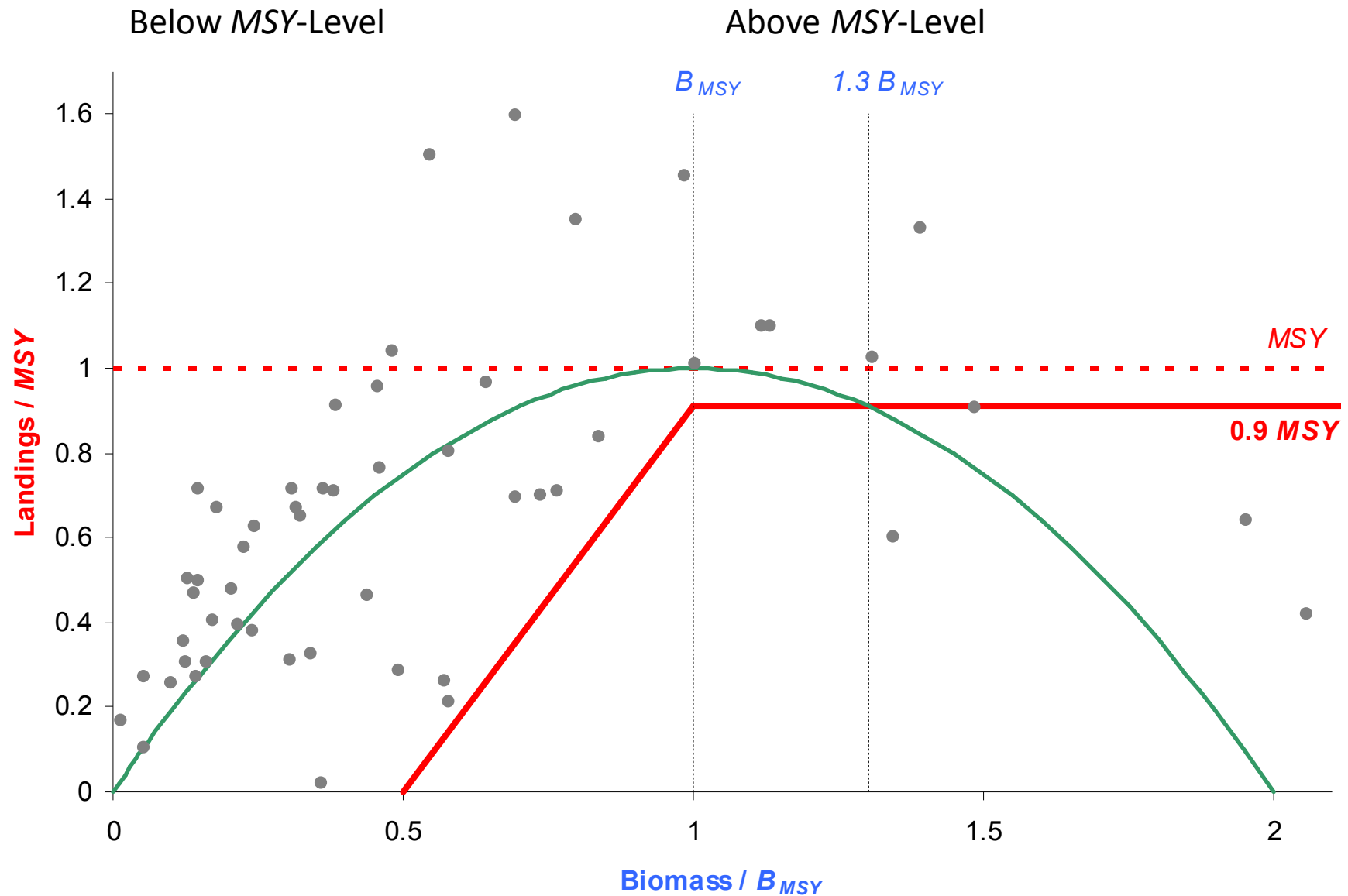
- 42% of the global trade in fish and fish products is imported by Europe
- A CFP reform that correctly implements the Law of the Sea and UNFSA, such as done by USA, NZ and AUS, will force others to follow
- A failed CFP reform will encourage continued overfishing, in Europe and globally
- US\$ 1.2 billion European fish exports into the USA will be endangered

Can All Stocks be Fished Simultaneously at *MSY*?

No

Therefore, stocks have to be maintained ABOVE the level that can produce the maximum sustainable yield and fishing pressure has to be less than F_{msy} .

MSY-Concept for European Stocks



The First ,Make-or-Break‘ Issue with the Basic Regulation Proposal

Article 2 and others prescribe that stocks are to be maintained ABOVE levels that can produce the maximum sustainable yield.

This is a proper implementation of UNCLOS, UNFSA, and the precautionary principle. It must survive the political process and remain in the new CFP.

Below *MSY* Level

- Stressed ecosystems
- Small fish
- Small stock size
- High fluctuations
- Low, uncertain catch
- High effort /cost
- Low / no profit
- Low impact impossible
- MPAs problematic
- Subsidies necessary
- Social status low (stubborn overexploiters)

Above *MSY* Level

- Healthy ecosystems
- Large fish
- Large stock sizes
- Low fluctuations
- High, certain catch
- Low effort /cost
- High profit
- Low impact possible
- MPAs unproblematic
- Subsidies not necessary
- Social status high (respected custodians)

How to get Above *MSY*-Level?

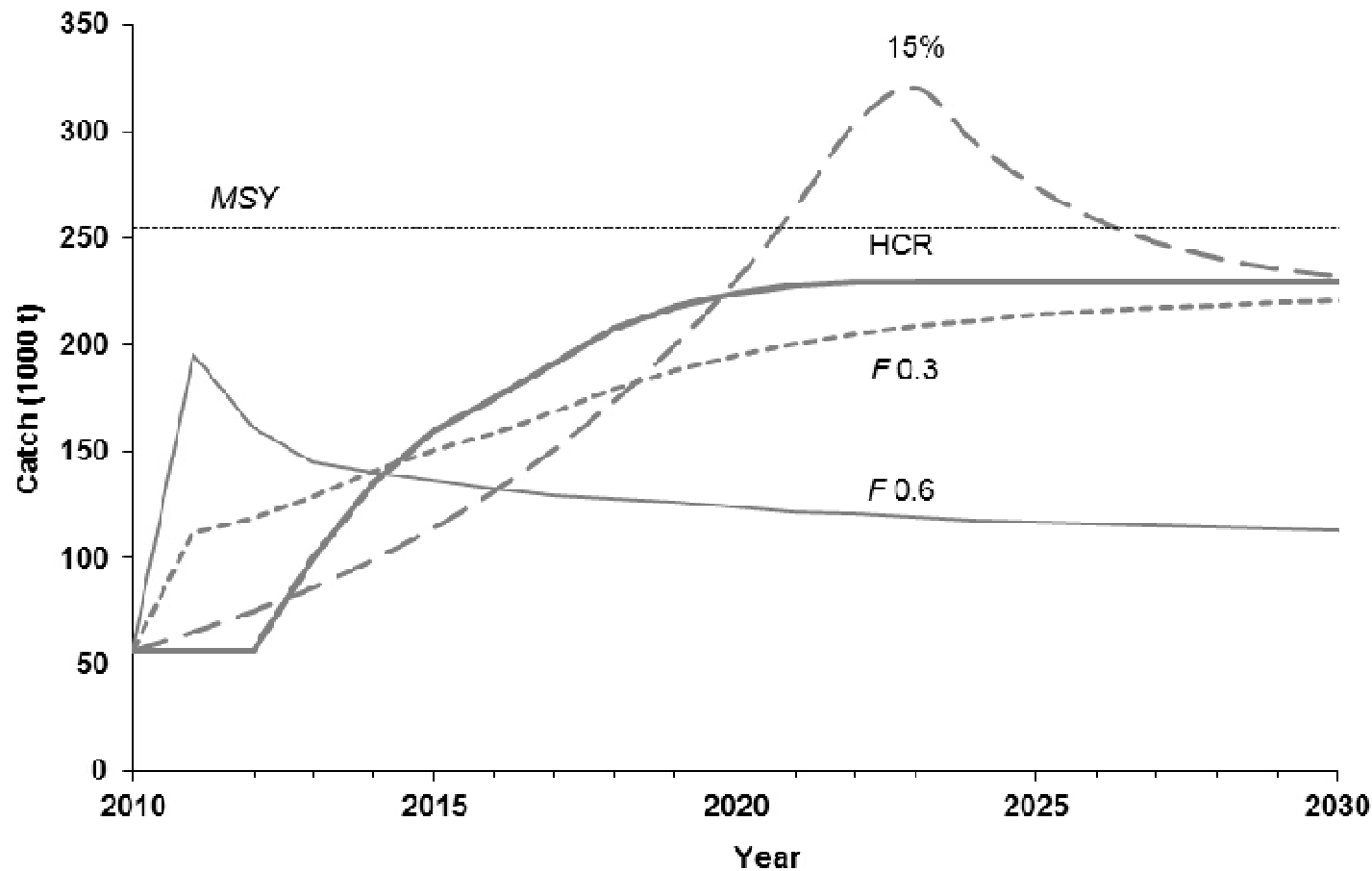
Background Info:

The faster Above-*MSY* level is reached, the higher the overall profits in the fishery

The fastest way is to close the fishery for 1-3 years, depending on the stock. In mid-term, this would bring the most profit to the fishery, but fishers still don't want it.

Alternatively, keep $F < F_{msy}$ (e.g. with 15% rule) and observe a slow recovery.

Options for Rebuilding the Eastern Baltic Cod



The Second ,Make-or-Break' Issues in the Basic Regulation Proposal

Article 16: The Council of Ministers shall fix 170+ fishing opportunities every year.

This is political micro-management resulting in overfishing.

Instead, the Council should only fix long-term management plans and leave implementation to administrators. Article 16 needs to be changed.

Summary

- The *MSY*-Framework is described by the law of the Sea.
- Together with the precautionary principle, it can rebuild stocks to 2/3–3/4 of unexploited levels
- **Keep:** In the CFP reform, stock sizes ABOVE *MSY* level have to be mandatory (Article 6)
- **Change:** Micro-management by the Council needs to end (Article 16)

Refs and Acknowledgements

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- Froese, R., D. Zeller, K. Kleisner and D. Pauly. 2012. What catch data can tell us about the status of global fisheries. *Marine Biology* doi:10.1007/s00227-012-1909-6

PDFs are available at www.fishbase.de/rfroese

Thank You

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