

Fisheries policies in the EU and Sweden, current situation and recent development – from the ecosystem perspective

Swedish Embassy Tokyo

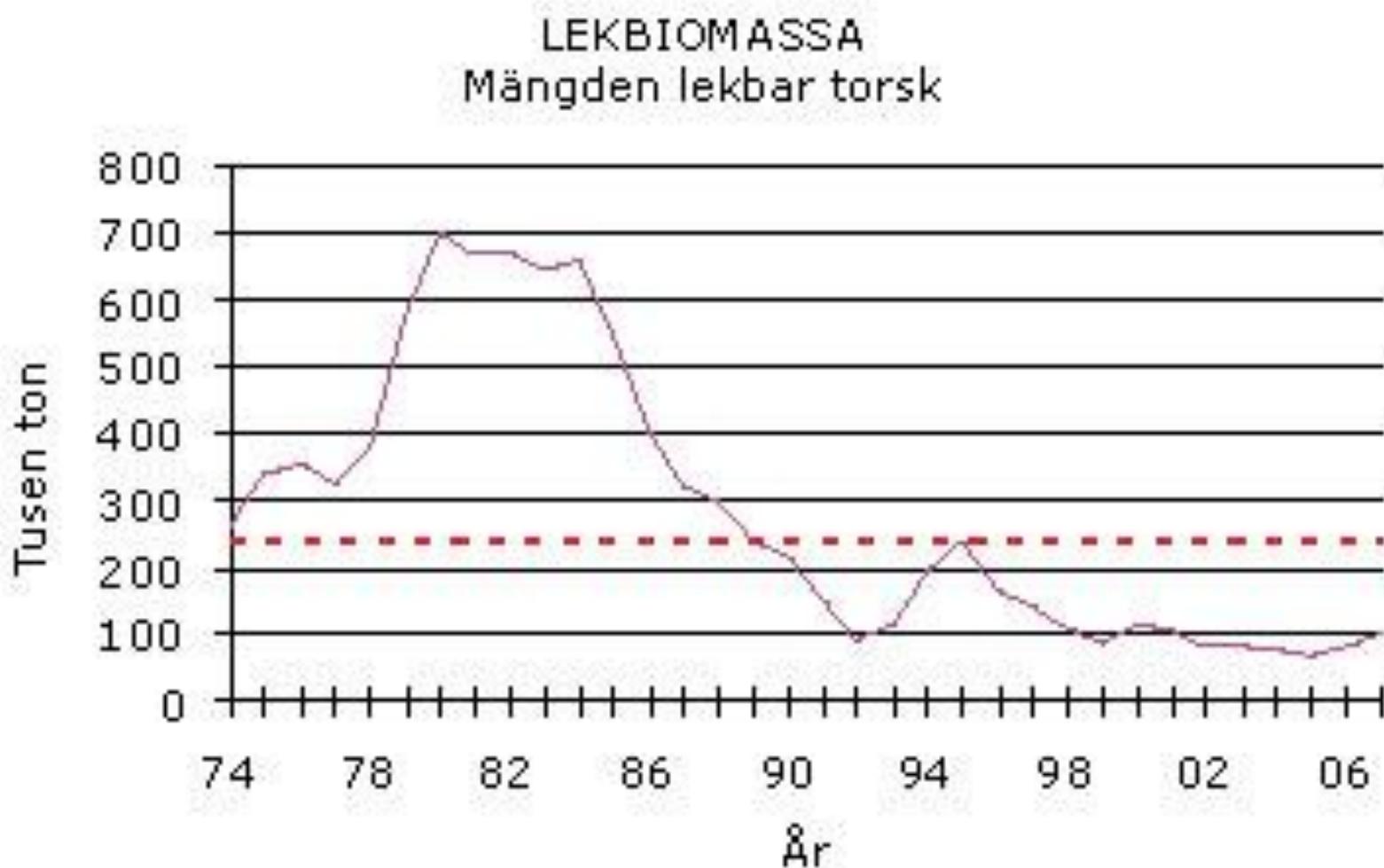
Lecture by Isabella Lövin



イサベラ・ロヴィーン
佐藤吉宗訳

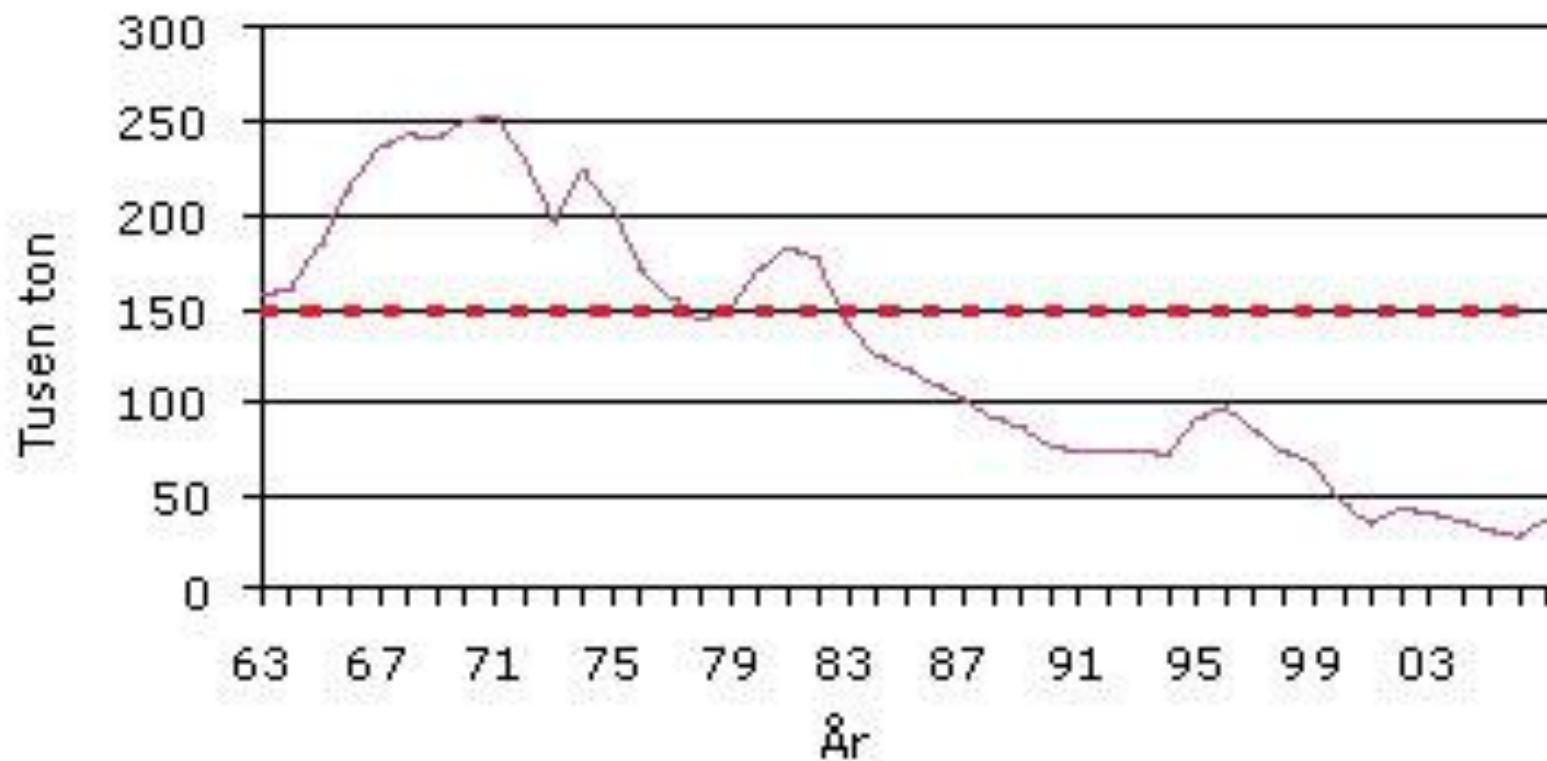
新評論
0920





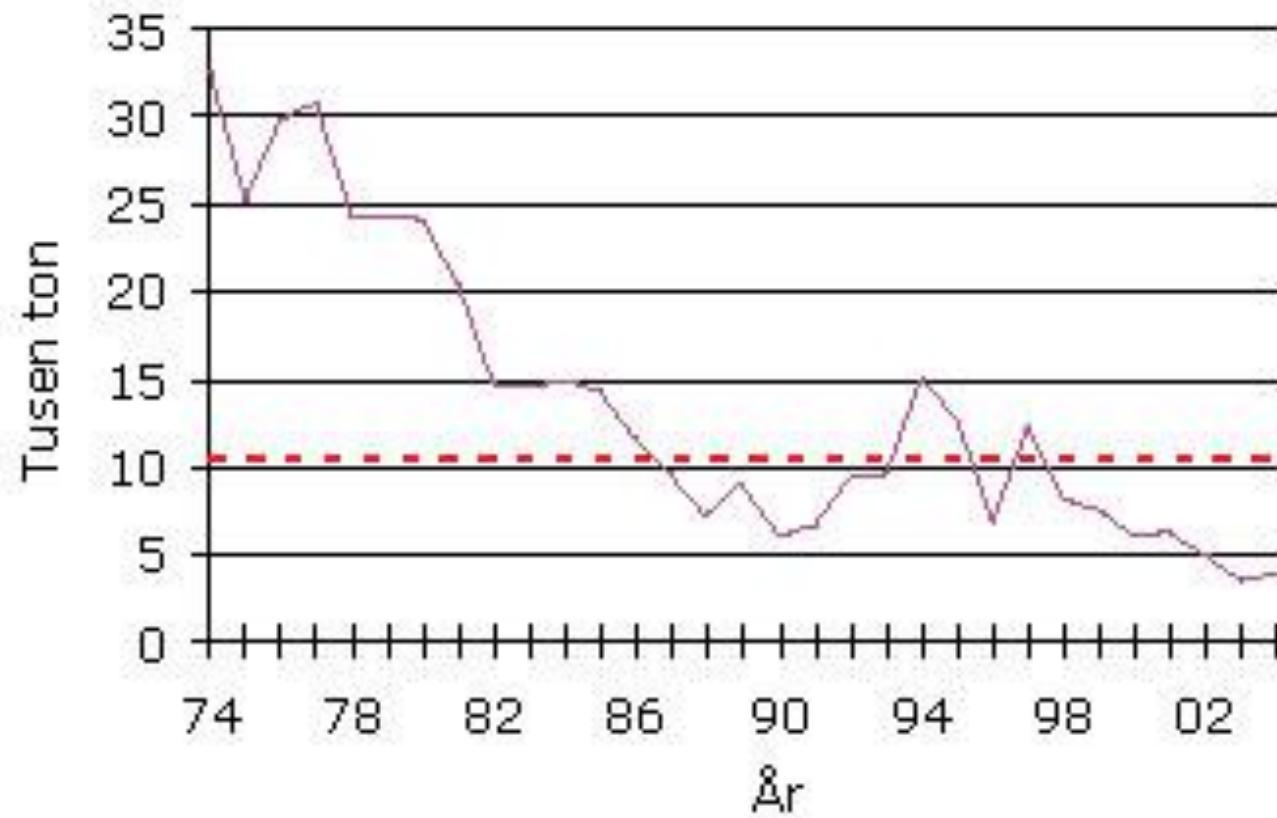
Biomass adult cod in the eastern Baltic. Red dotted line
= precautionary approach limit. Lower biomass = risk of
collapse.

LEKBIOMASSA
Mängden lekbar torsk

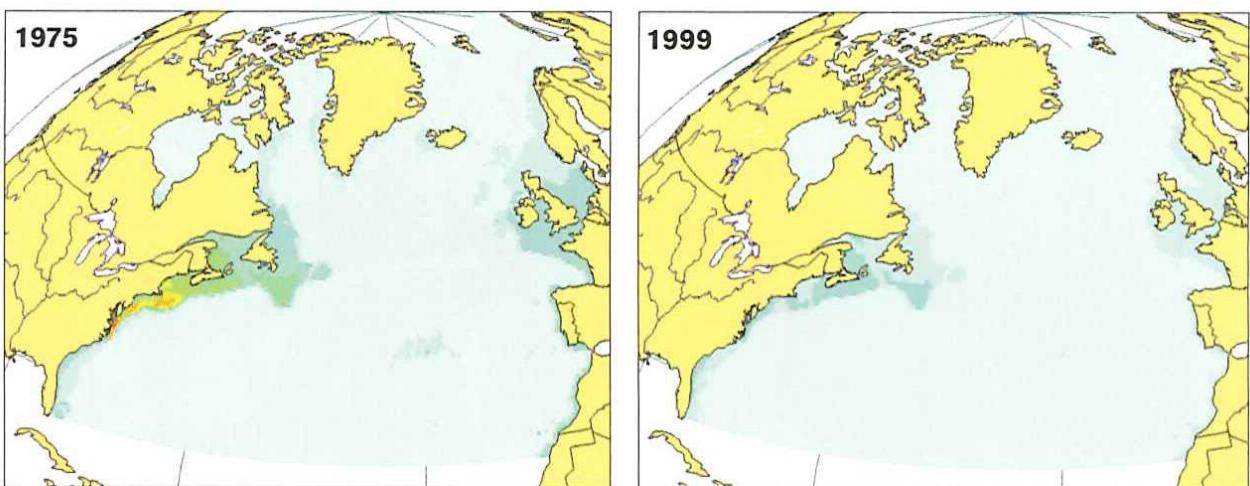
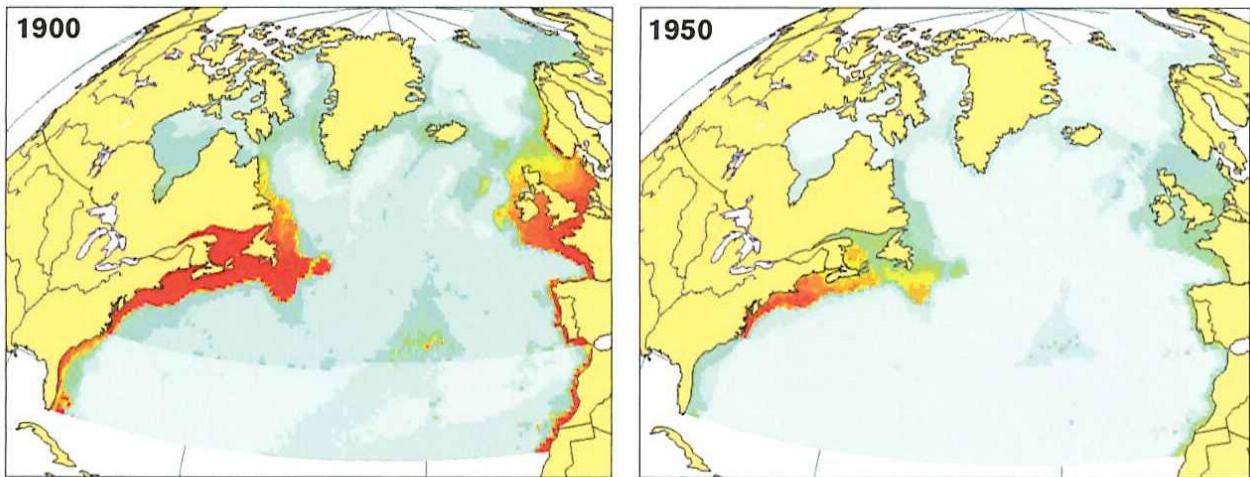


Biomass adult cod in the North Sea and Skagerrak. Dotted line shows the precautionary approach limit.

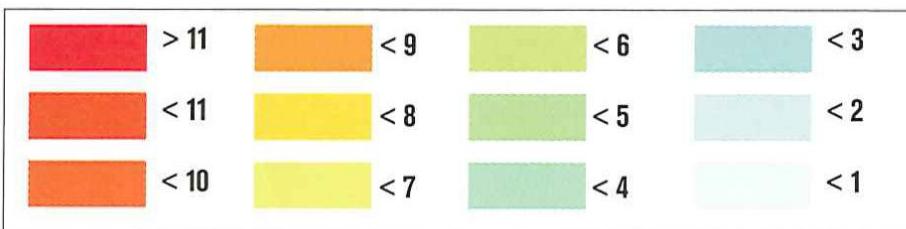
LEKBIOMASSA
Mängden lekbar torsk

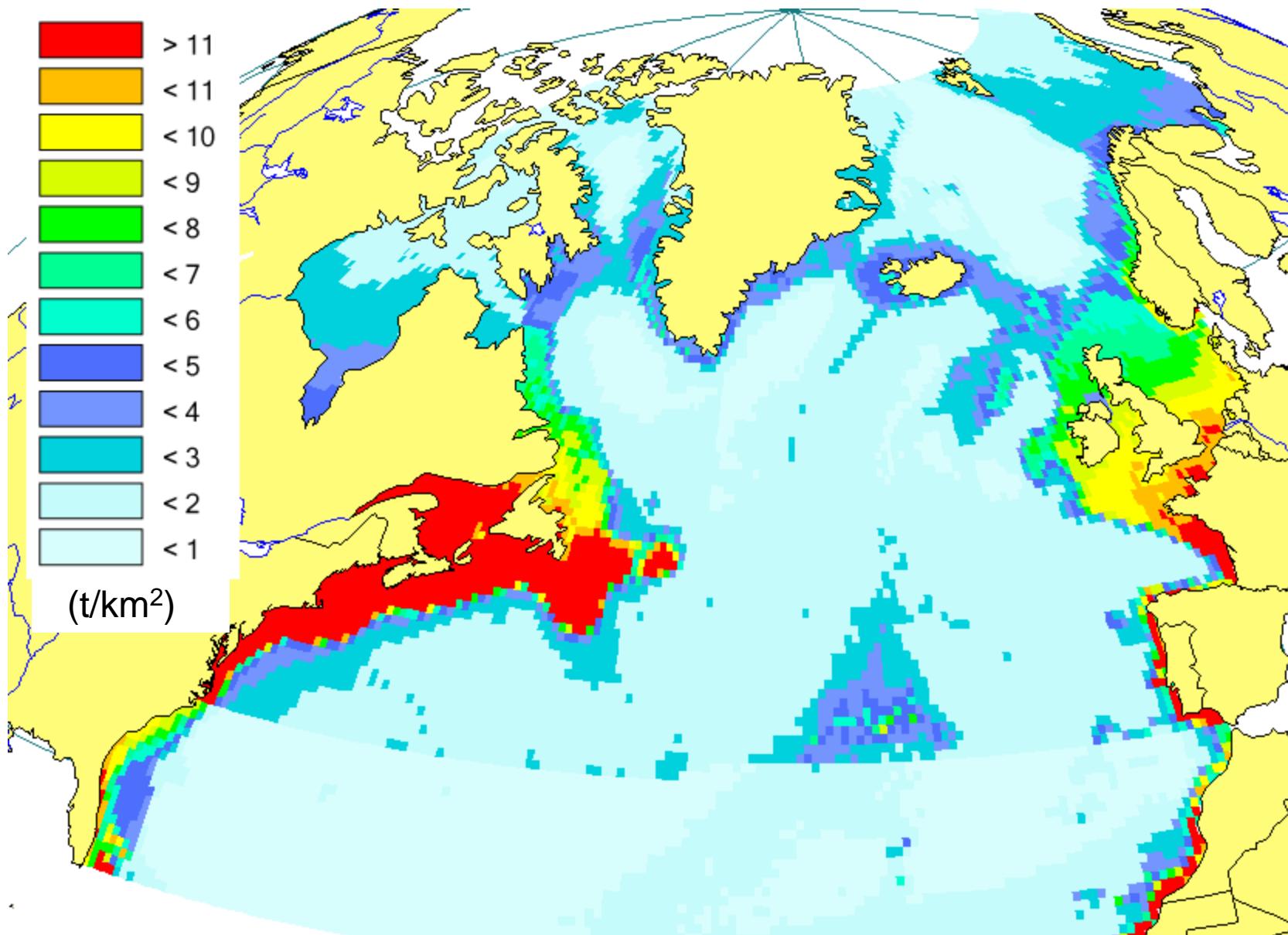


Adult cod in the Kattegat Sea. Dotted line shows the precautionary approach limit.



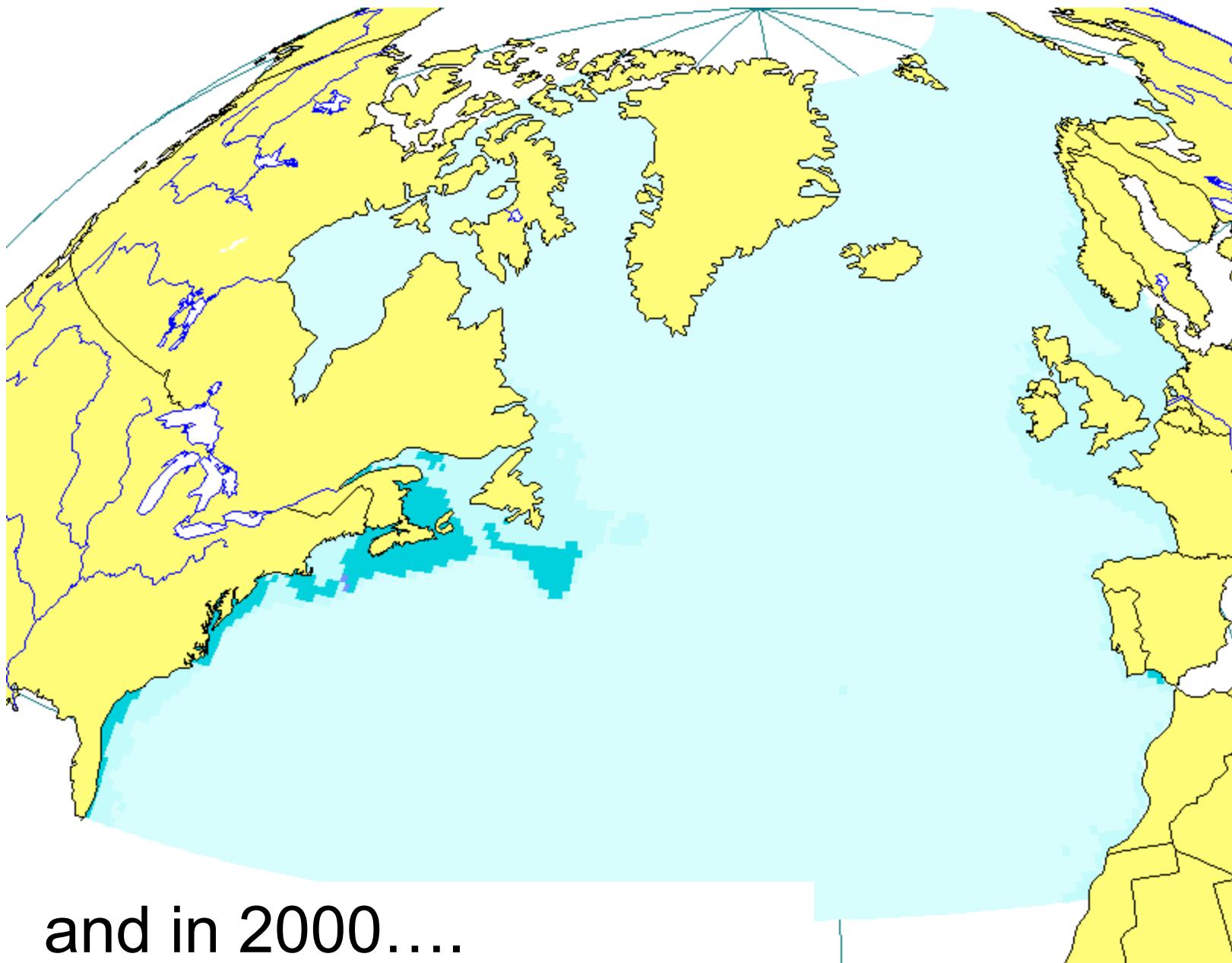
Biomassa ($t \cdot km^{-2}$)





Biomass of table fish in 1900

(Christensen et al. (2003))



and in 2000....

European mysteries (EU-Commission "Greenpaper")

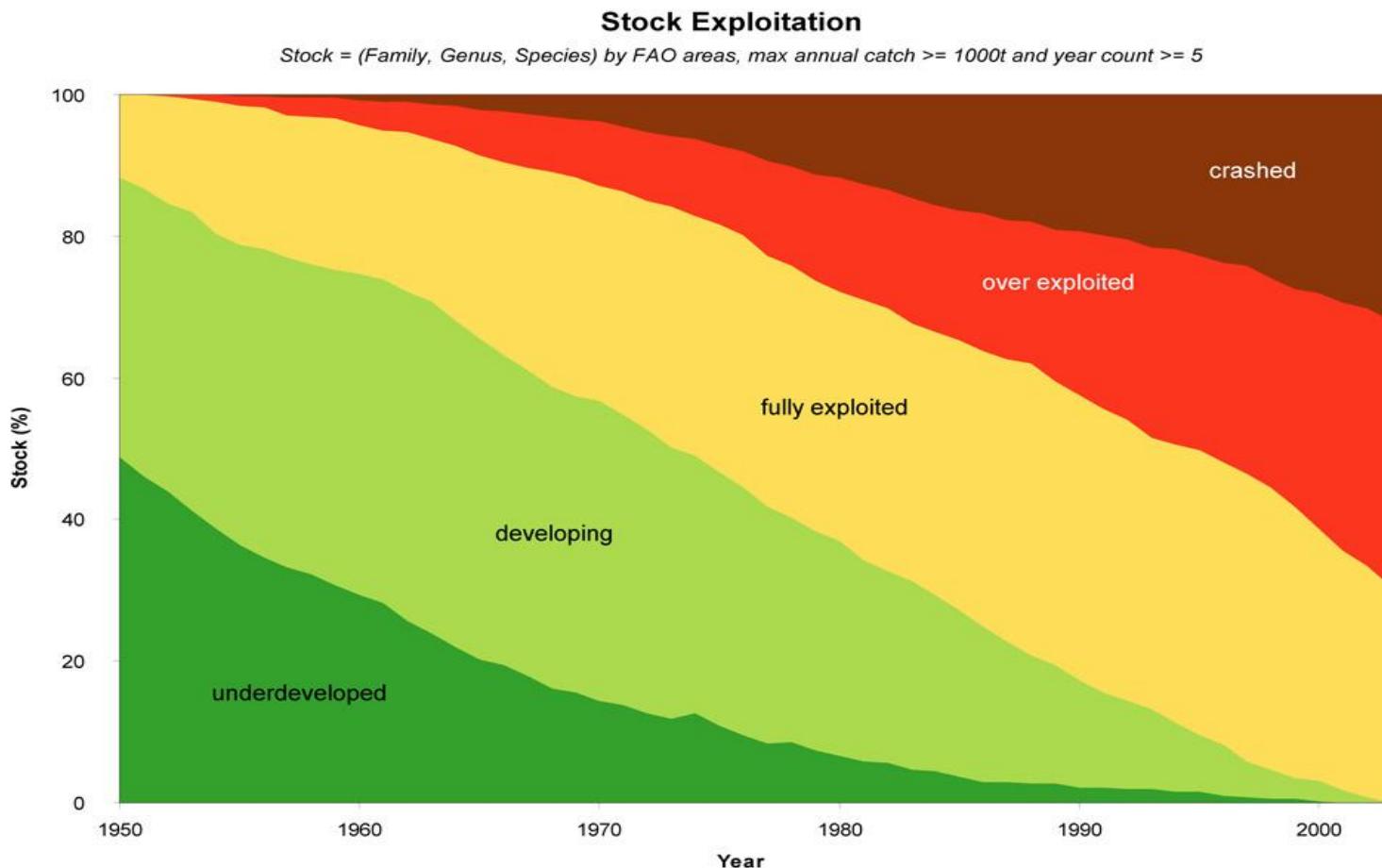
- 88 percent of EU fish stocks fully or overexploited, 30 percent out of safe biological limits
- Eu fishing for small/young fish: 93 per cent of cod caught in the North Sea has not spawned
 - * Since 1997 EU-27-countries decrease in catches by 26 procent
 - * One tonne of fish = half a tonne of fuel
 - * EU imports increasing, now 60 per cent

,

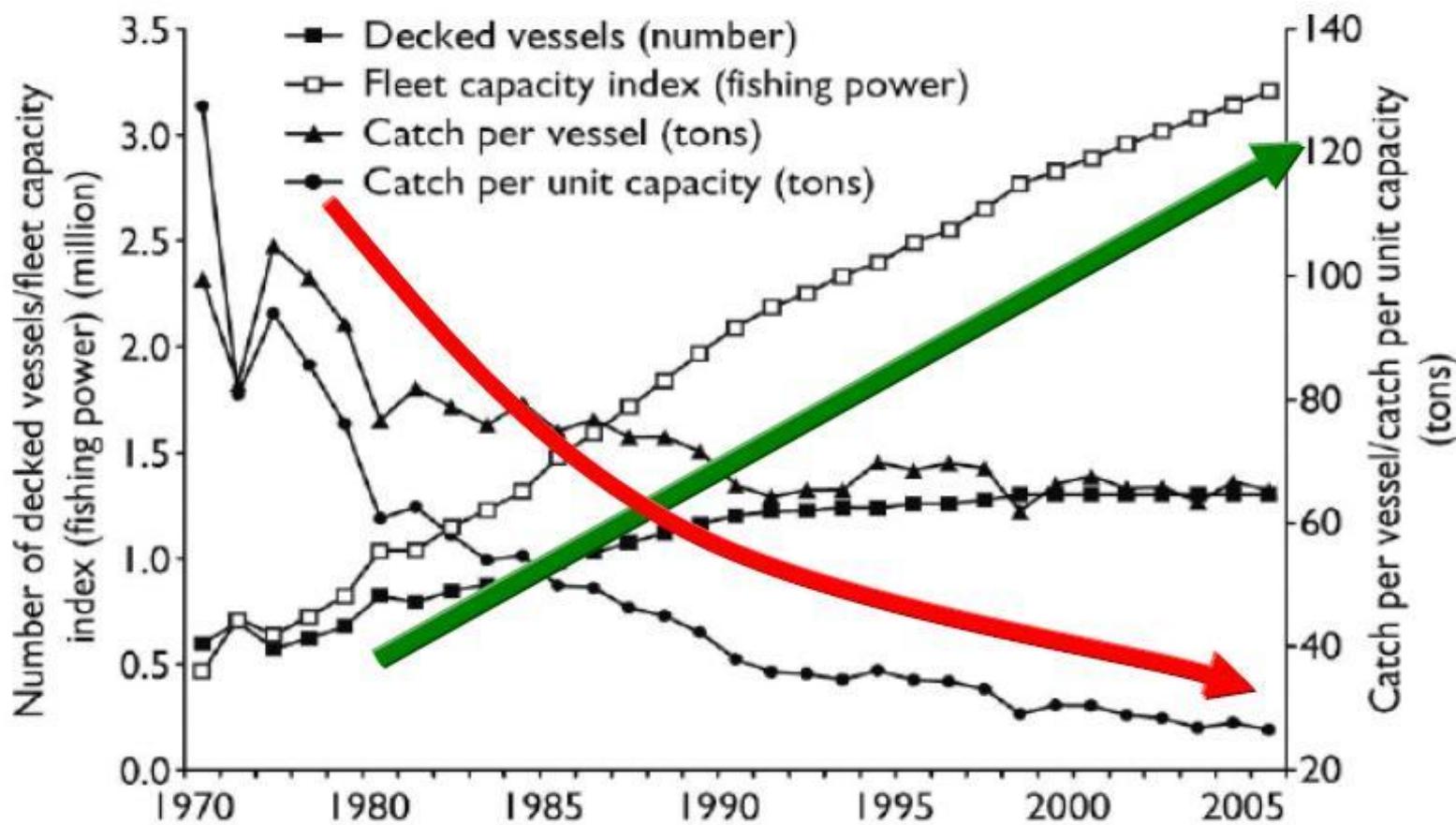
Is import the answer?



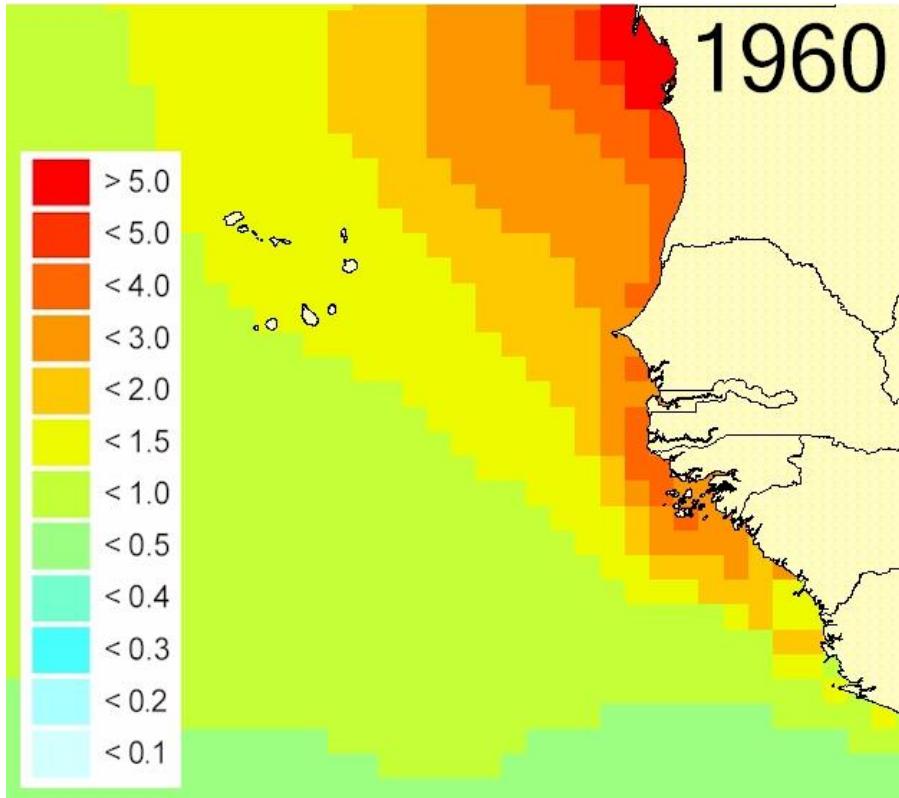
State of fish stocks, globally



Source: Froese and Pauly (2004)

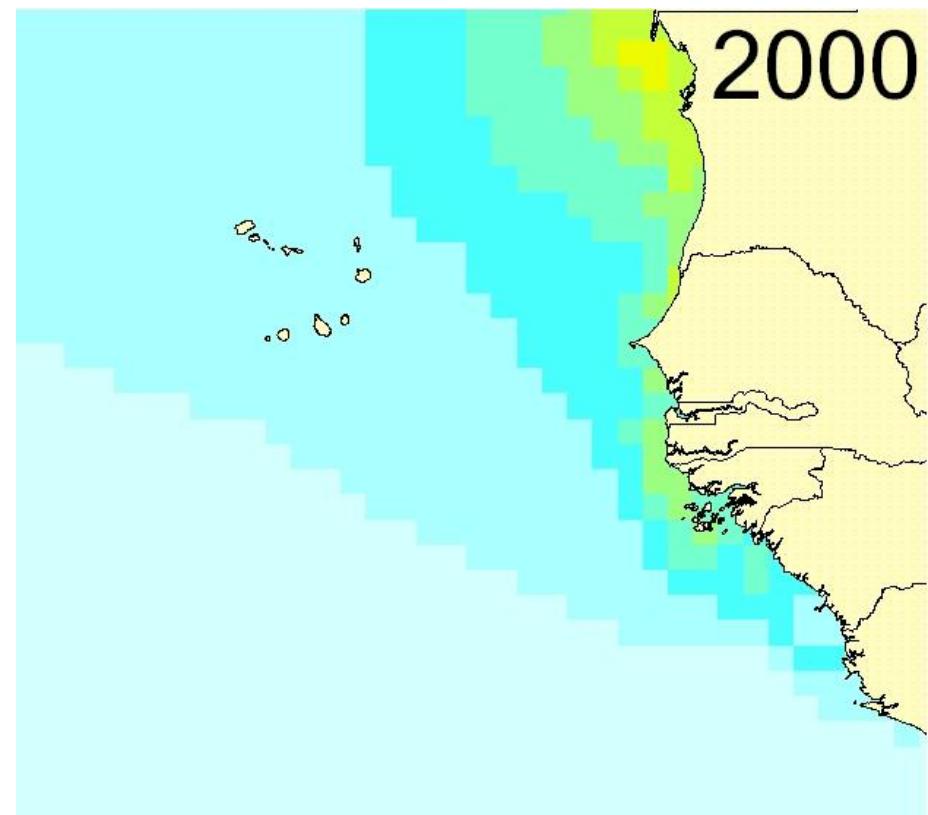


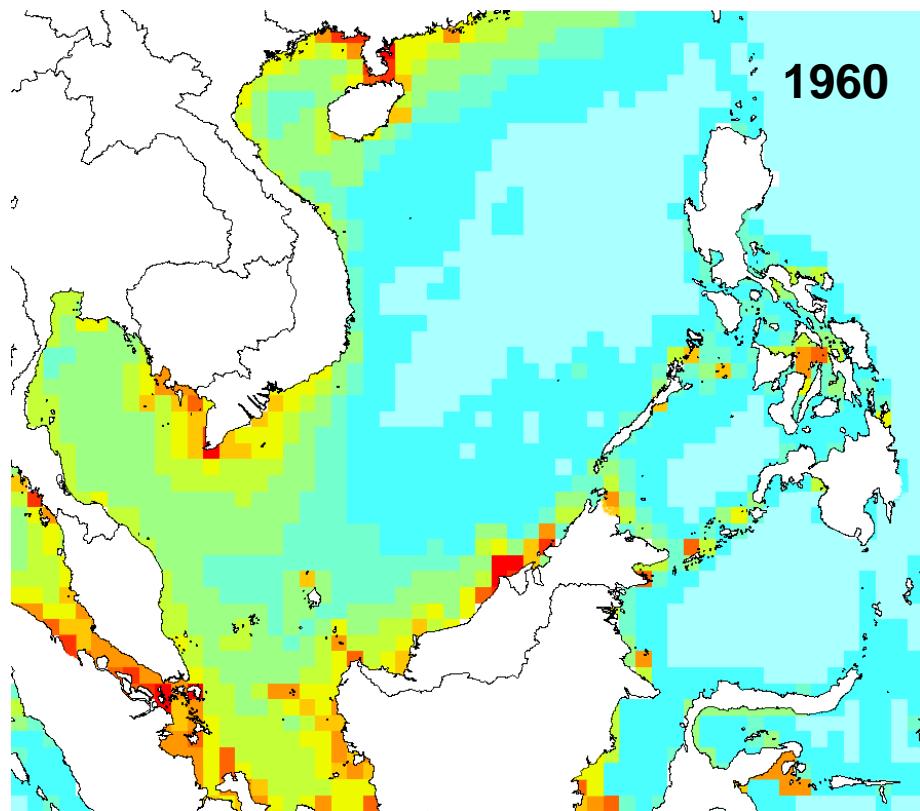
- >> Estimated subsidies p.a.: 15 - 35 billion US\$
- >> Estimated net benefit losses p.a.: 50 billion US\$



Same thing in West Africa, where European fleets operate on the basis of questionable access agreements.

Christensen et al. (2004,
Dakar Conference Proceedings)

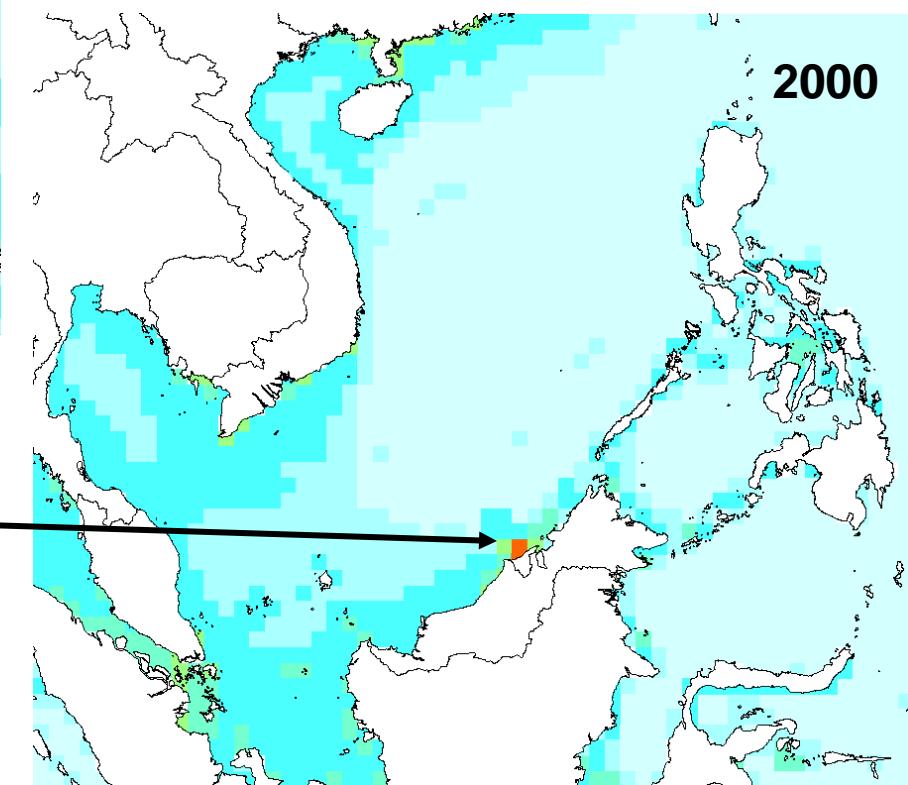




1960

Note Brunei as exception (because of the oil rigs functioning as MPA)

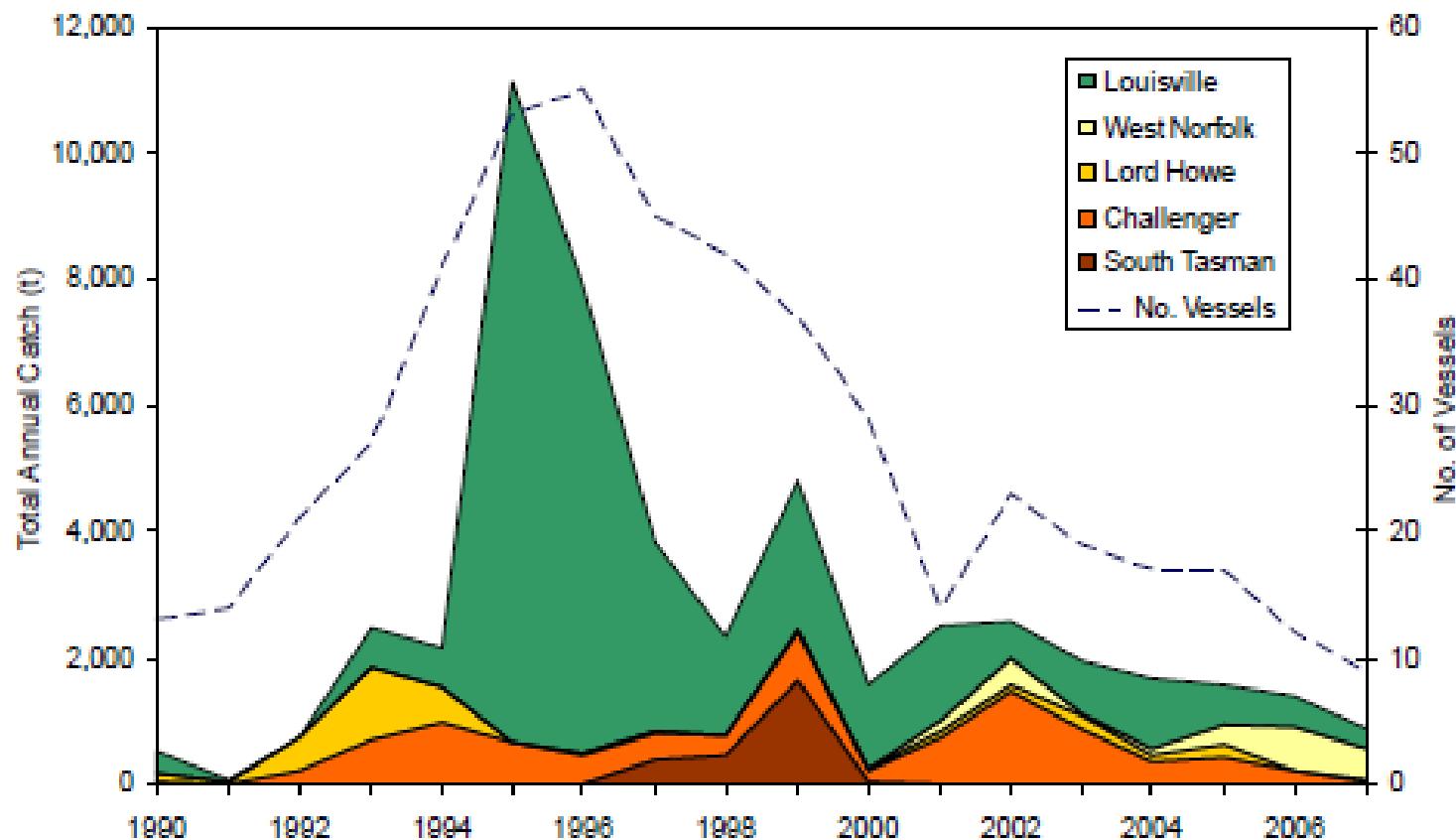
The development of bottom trawling led to similar results in Southeast Asia...



2000

Christensen et al. (2003)

Orange roughy catches South Pacific (NZ)



Serial depletion of seamount fisheries

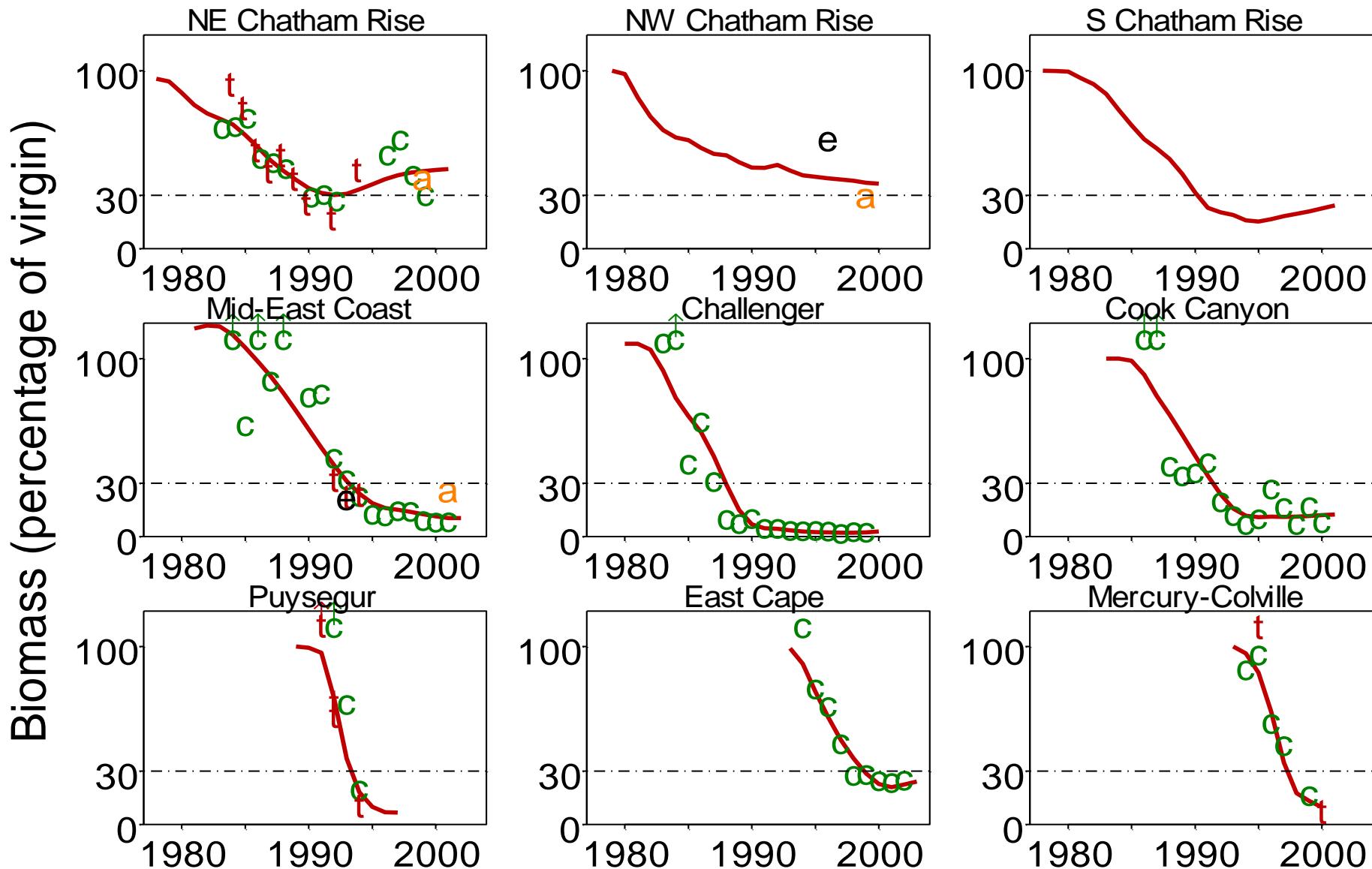






Photo credit:
James
Kitchell,
University of
Wisconsin,
Center for
Limnology



Photo: James Kitchell, Univ of Wisconsin, Center for Limnology

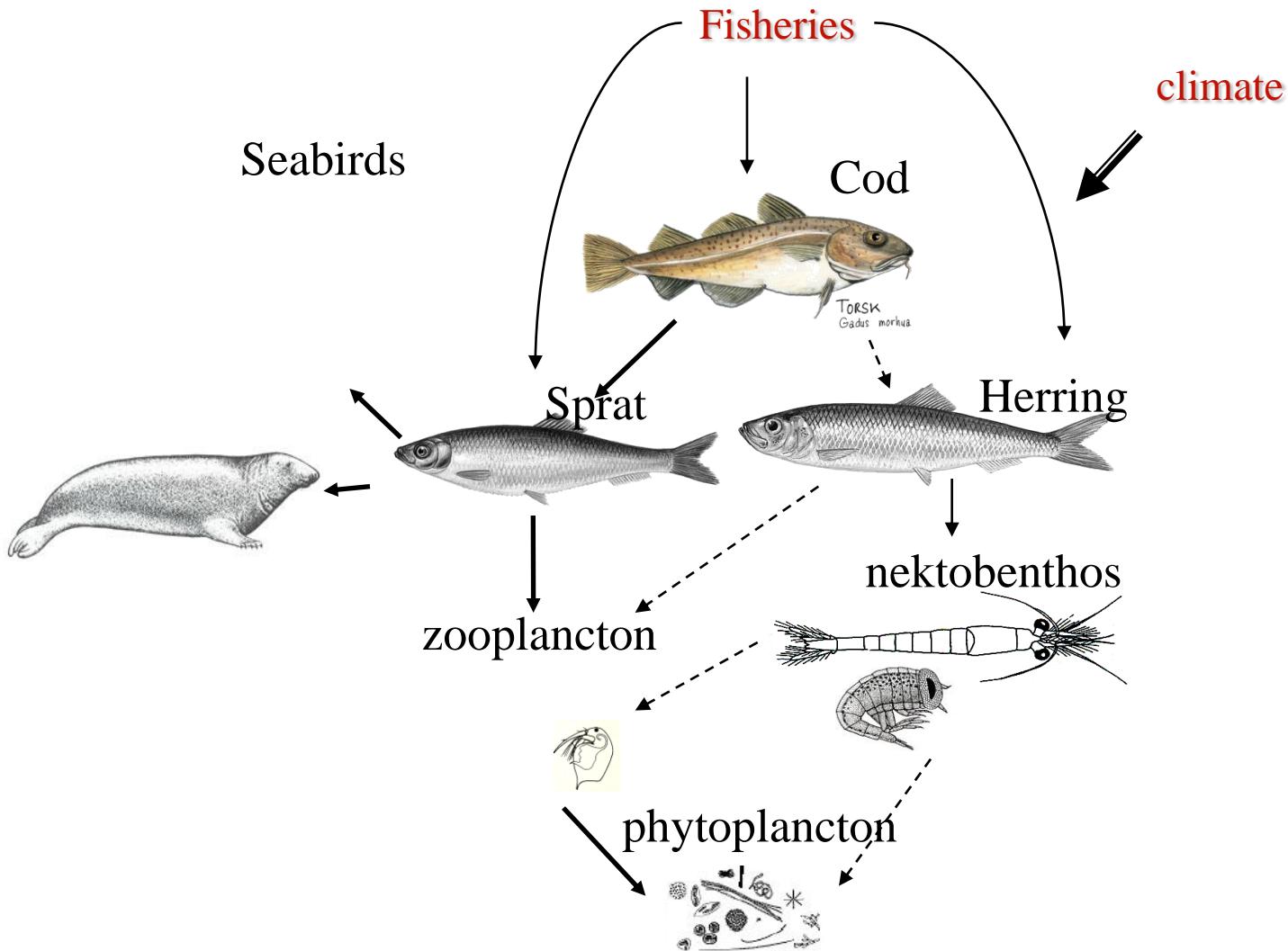


Cyanobacterial blooms in the Baltic Sea

MODIS AQUA 2005-07-06, data from NASA

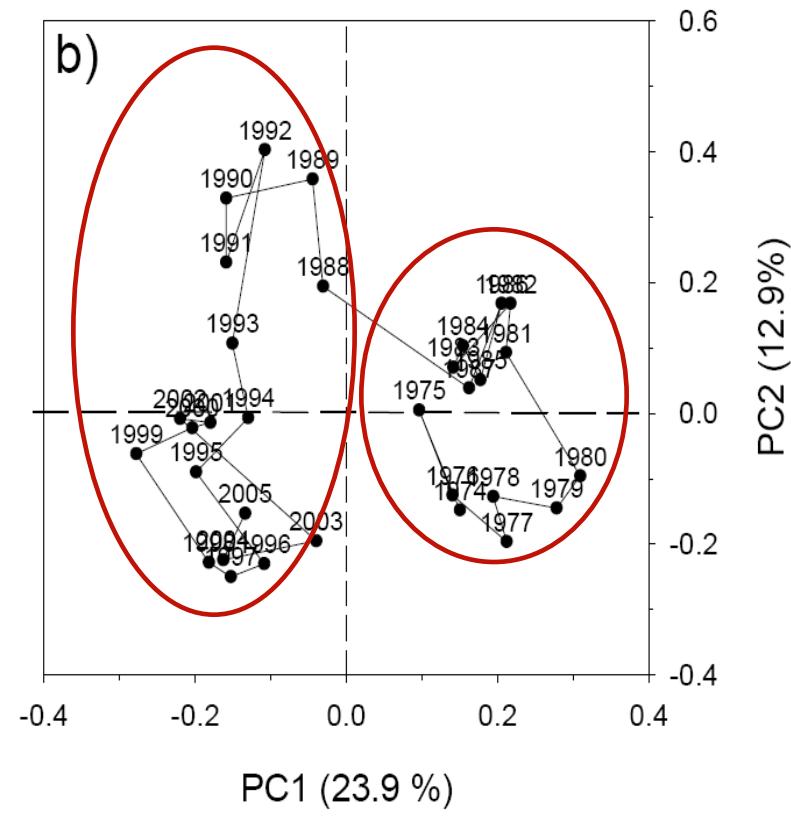
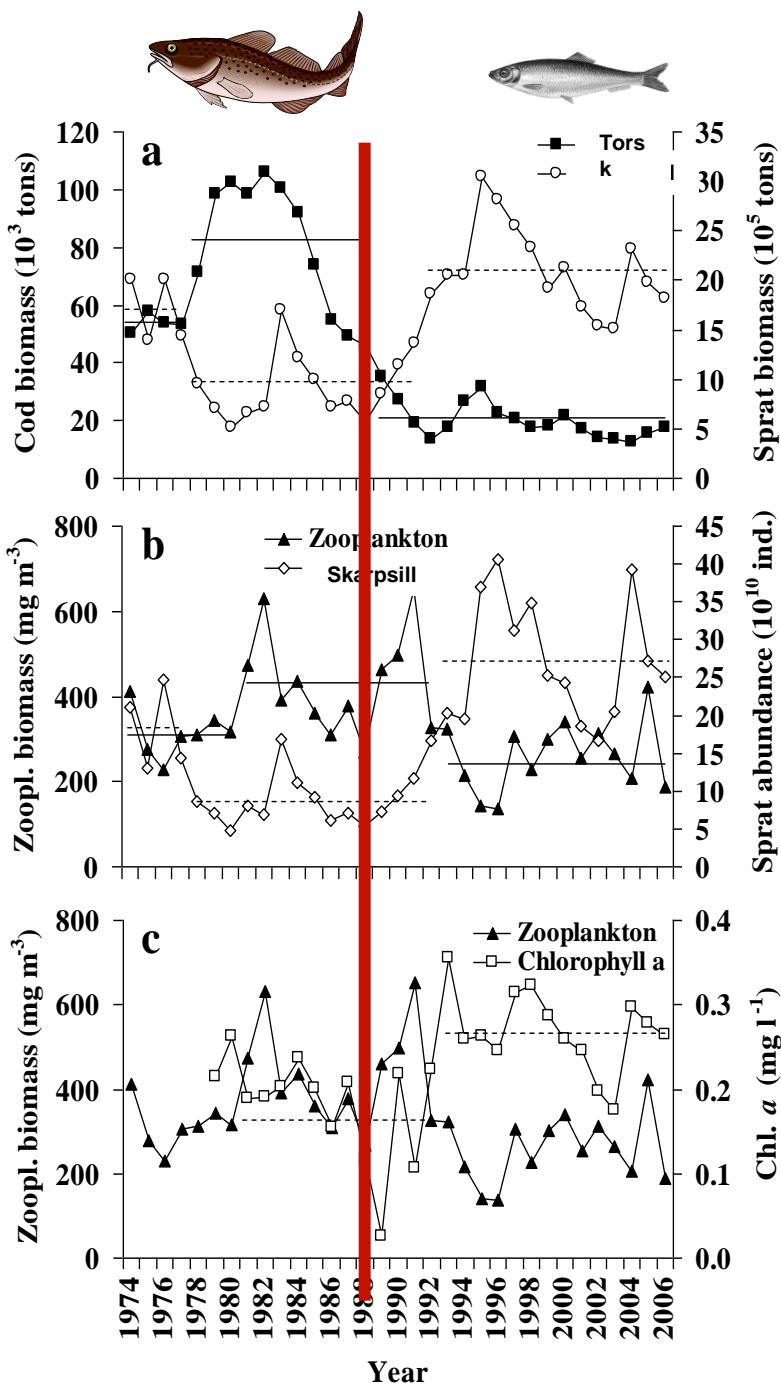
processed by SMHI

Food chain in the Baltic



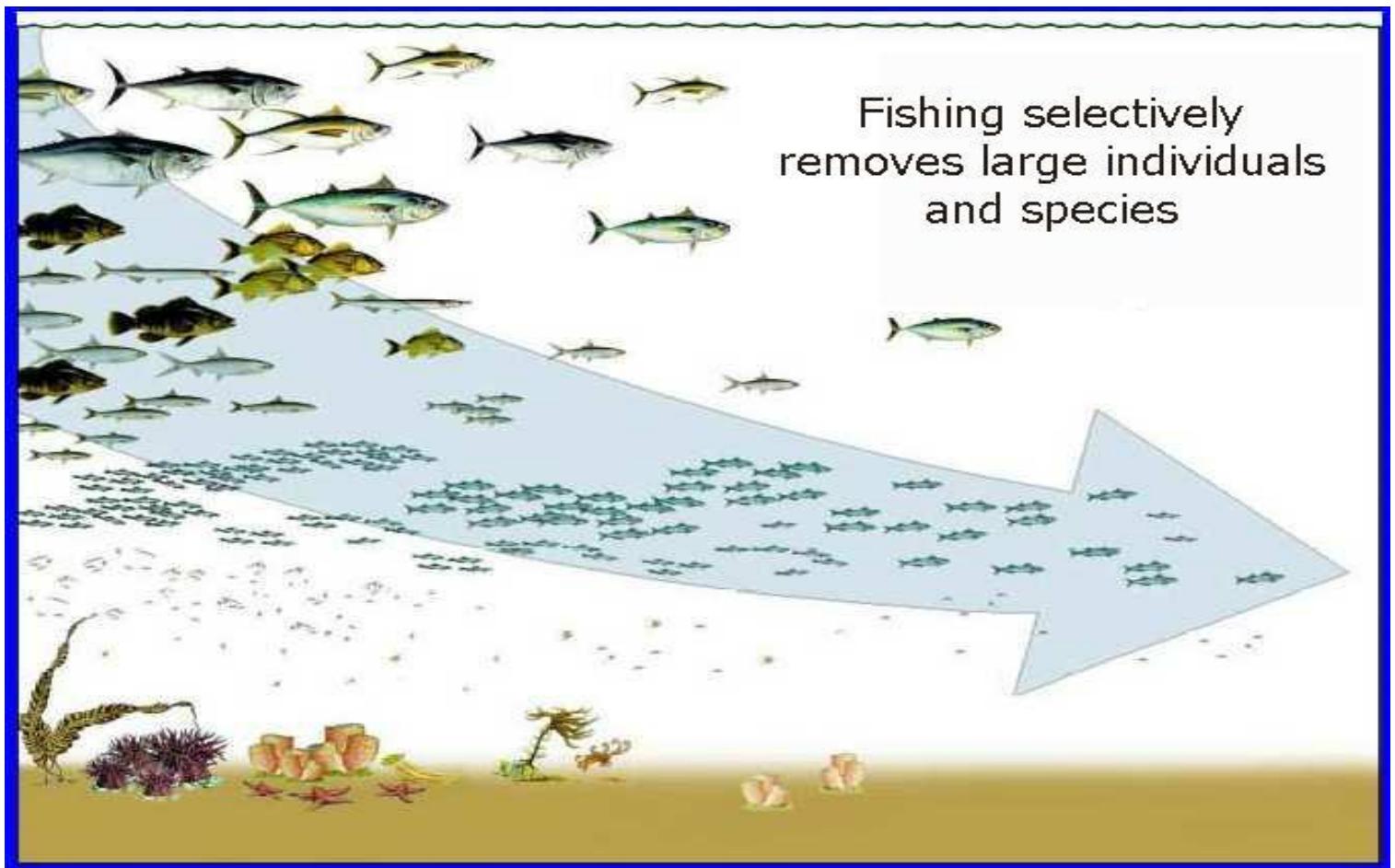
Nutrients (eutrophication)

Changes in the Baltic



Based on 65 environmental variables

"Fishing down the food web"





KEY WEST, FLORIDA
1950's

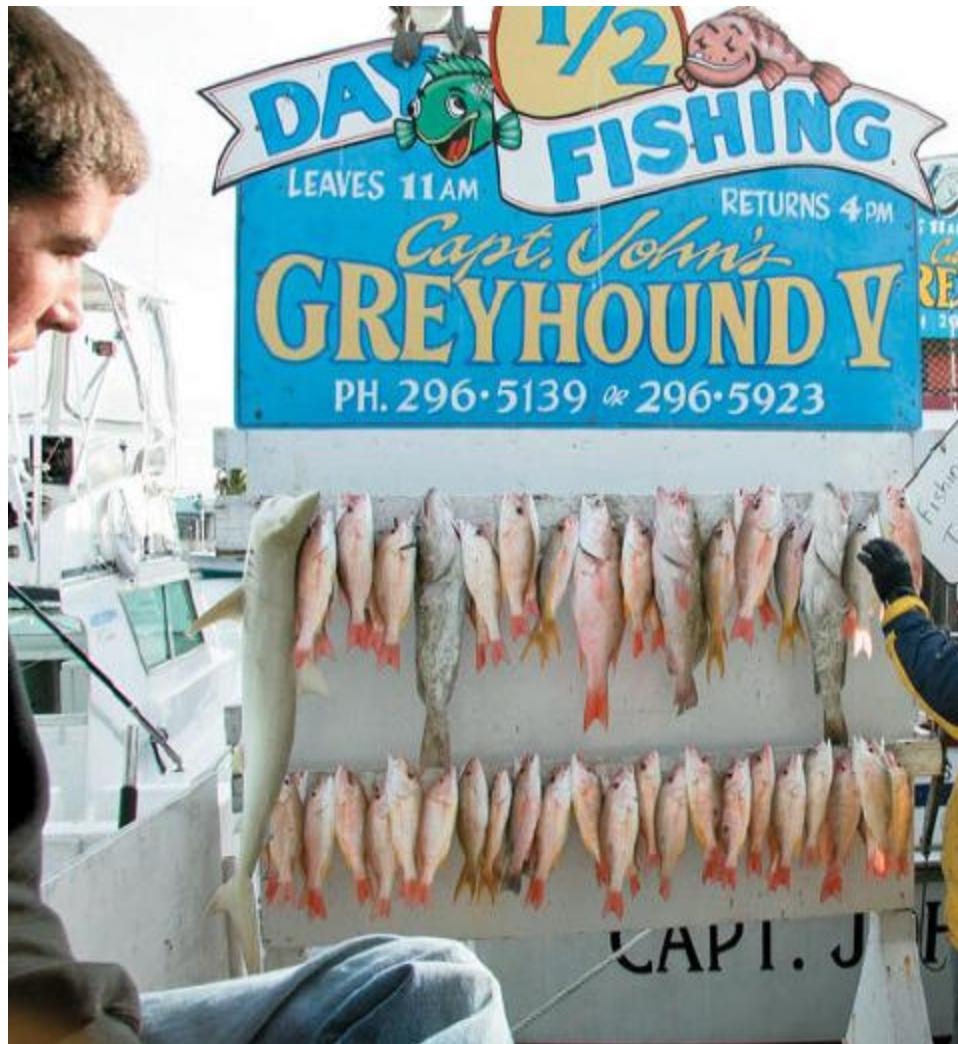


**KEY WEST, FLORIDA,
1983**



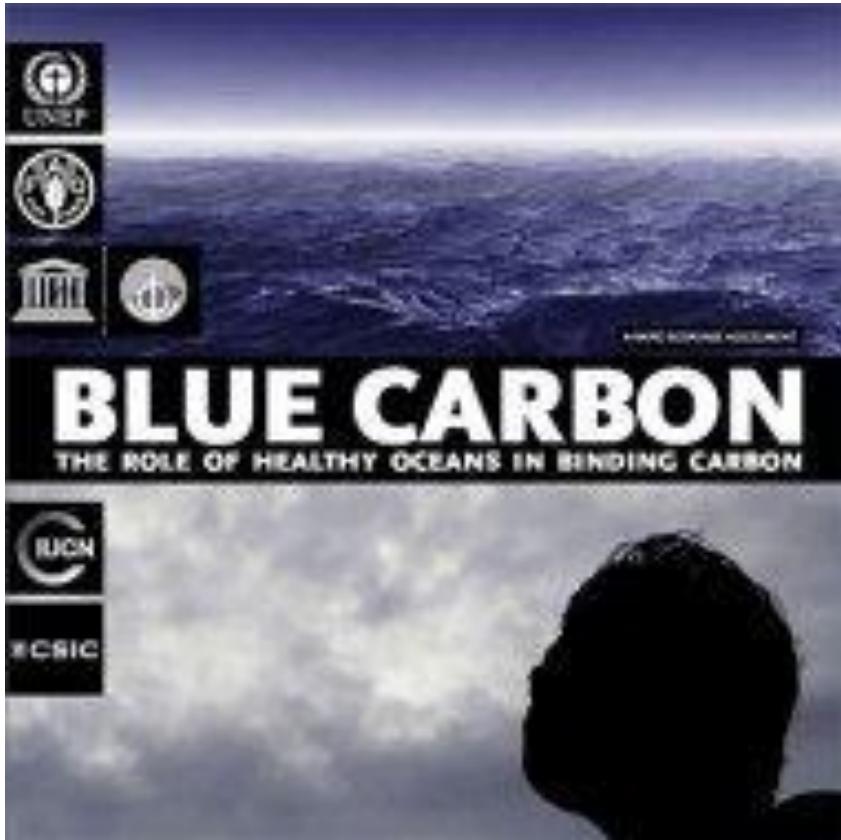
Source: L.
McClenah
an/Callum
Roberts

KEY WEST, FLORIDA
2007



Source:
Callum Roberts

Latin name	English namn	Category
<i>Dipturus batis</i>	common skate	RE* (regionally extinct)
<i>Acipenser oxyrinchus</i>	sturgeon	RE
<i>Cetorhinus maximus</i>	basking shark	CR * (critically endangered)
<i>Lamna nasus</i>	porbeagle shark	CR
<i>qualus acanthias</i>	spiny dogfish	CR*
<i>Pollachius pollachius</i>	pollack	CR*
<i>Anguilla anguilla</i>	eel	CR
<i>Hippoglossus hippoglossus</i>	halibut	EN (endangered)
<i>Raja clavata</i>	thornback skate	EN*
<i>Melanogrammus aeglefinus</i>	haddock	EN *
<i>Molva molva</i>	ling	EN*
<i>Coryphaenoides rupestris</i>	roundnose grenadier	EN*
<i>Anarchicas lupus</i>	wolffish	EN*
<i>Gadus morhua</i>	cod	EN
<i>Etmopterus spinax</i>	velvet belly shark	VU (vulnerable)
<i>Galeorhinus galeus</i>	tope shark	VU
<i>Somniosus microcephalus</i>	Greenland shark	VU *
<i>Merlangius merlangus</i>	whiting	VU
<i>Psetta maxima</i>	turbot	NT (near threatened)
<i>Cyclopterus lumpus</i>	lumpsucker	NT*
<i>Zoarces viviparus</i>	viviporous eelpout	NT
<i>Sebastes viviparus</i>	norway redfish	NT
<i>Lesueurigobius friesii</i>	fries goby	DD (data deficient)



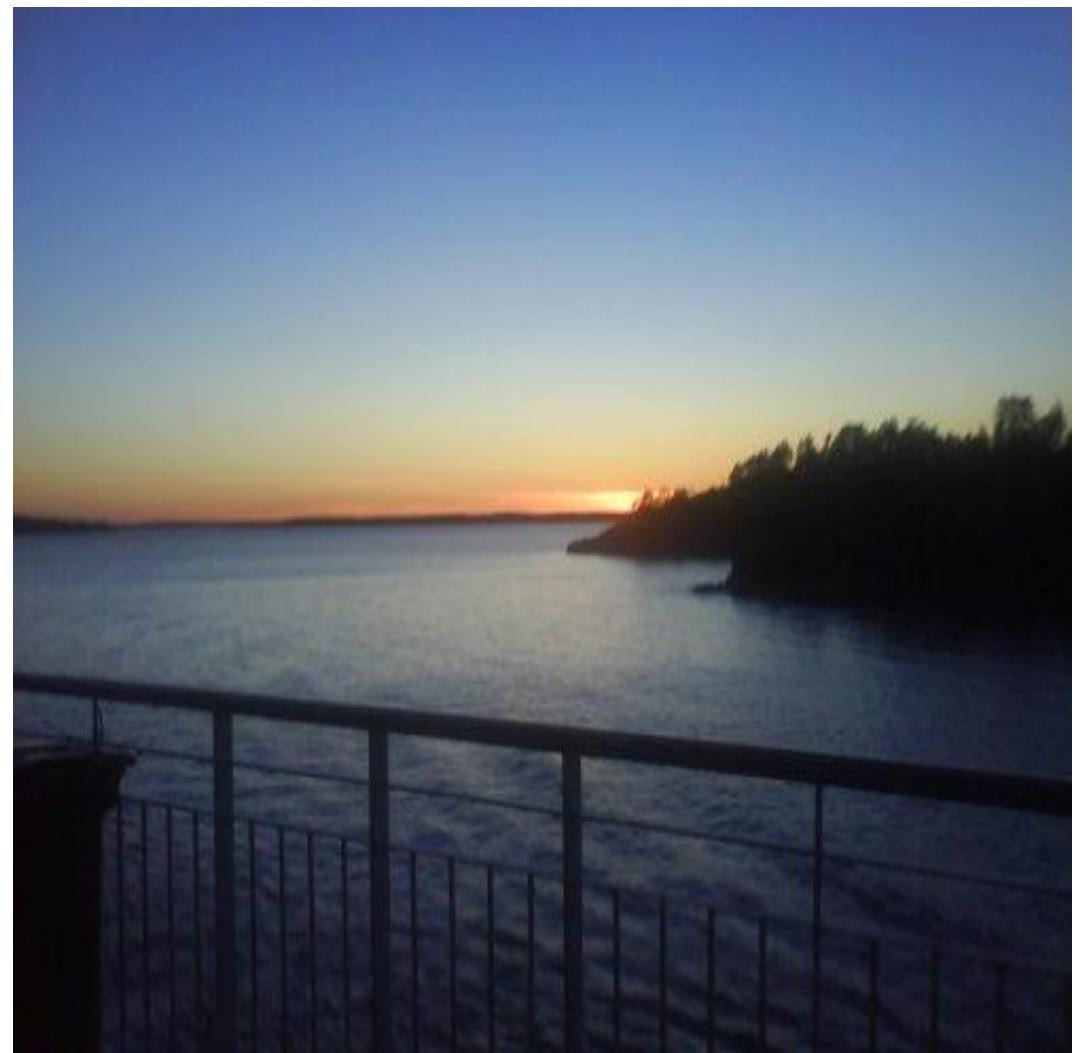
The Role of Healthy Oceans in Binding Carbon (FAO, UNEP, UNESCO, IUCN):

- * At present 50 % of all carbon in atmosphere that gets sequestered is cycled into seas and oceans
- * 70 % of carbon stored in marine realm is in coastal ecosystems (0,5 % of total seabed)
- * Annual loss of sequestration capacity of 2 – 7 %.

How can it happen?

Explanations

1. Invisible for the public eye
2. Not "environment"
3. The tragedy of the Commons
4. Lobbyists: Socio-economic values
5. Subsidies

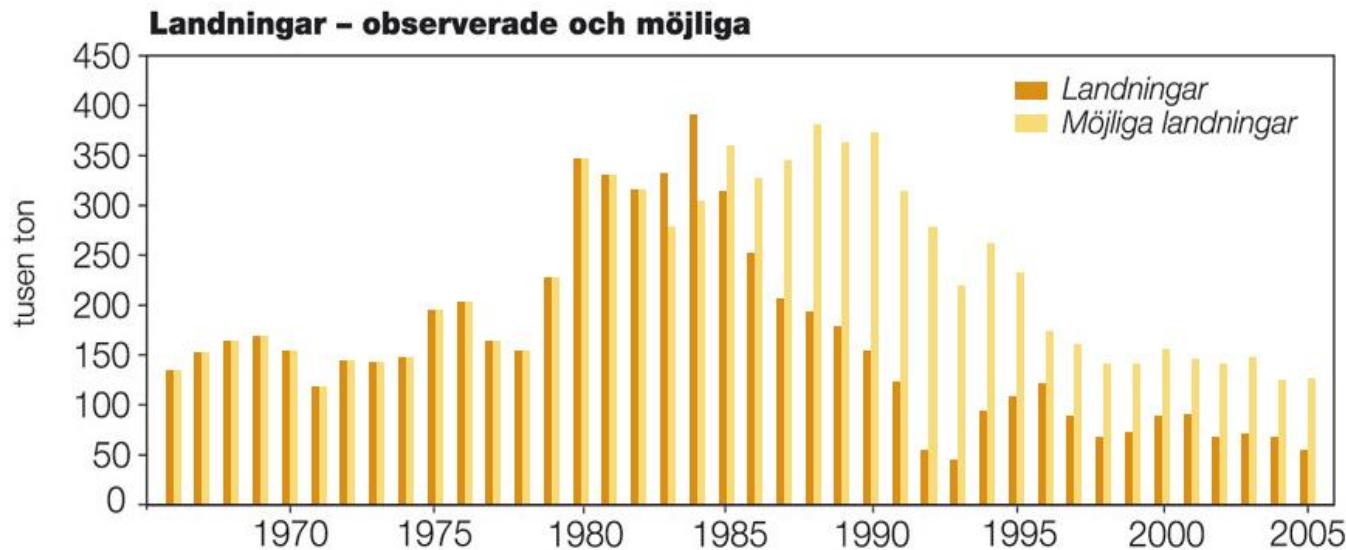


ICCAT =

International Commission for the
Conservation of Atlantic Tuna
International Conspiracy to Catch All
the Tuna

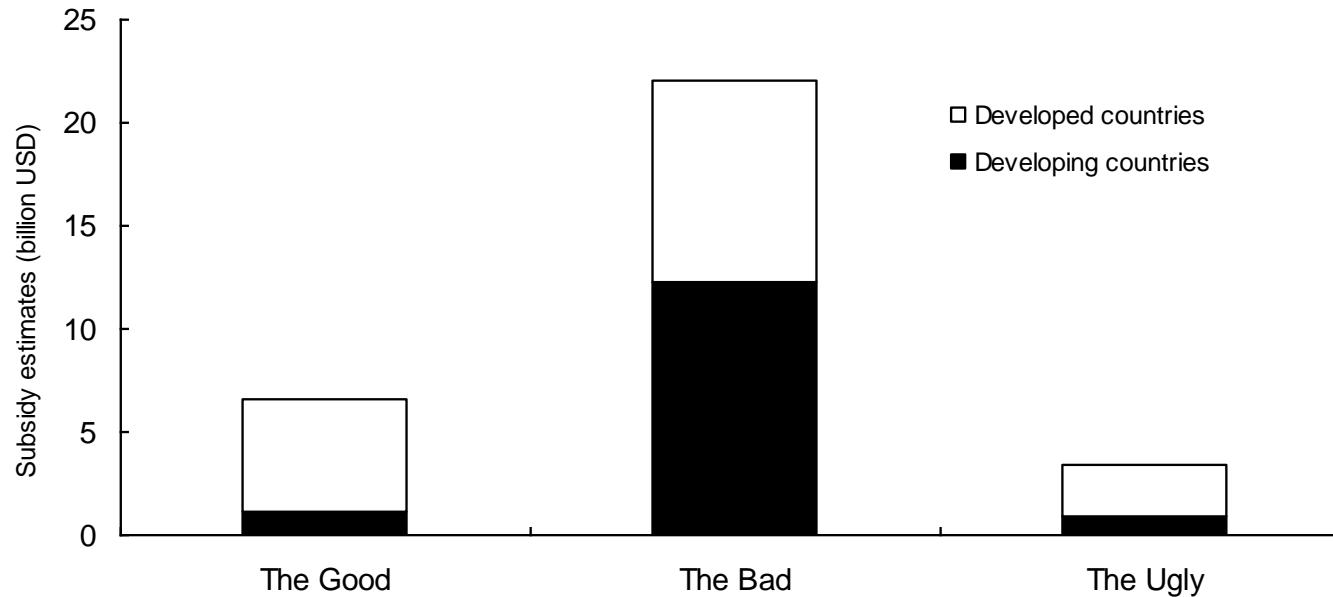
Follow scientific advice?

Possible landings of cod in the Baltic Sea:



Source: Swedish Board of Fisheries

Taking away subsidies? The good, the bad and the ugly...



2 types: direct financial support and indirect support

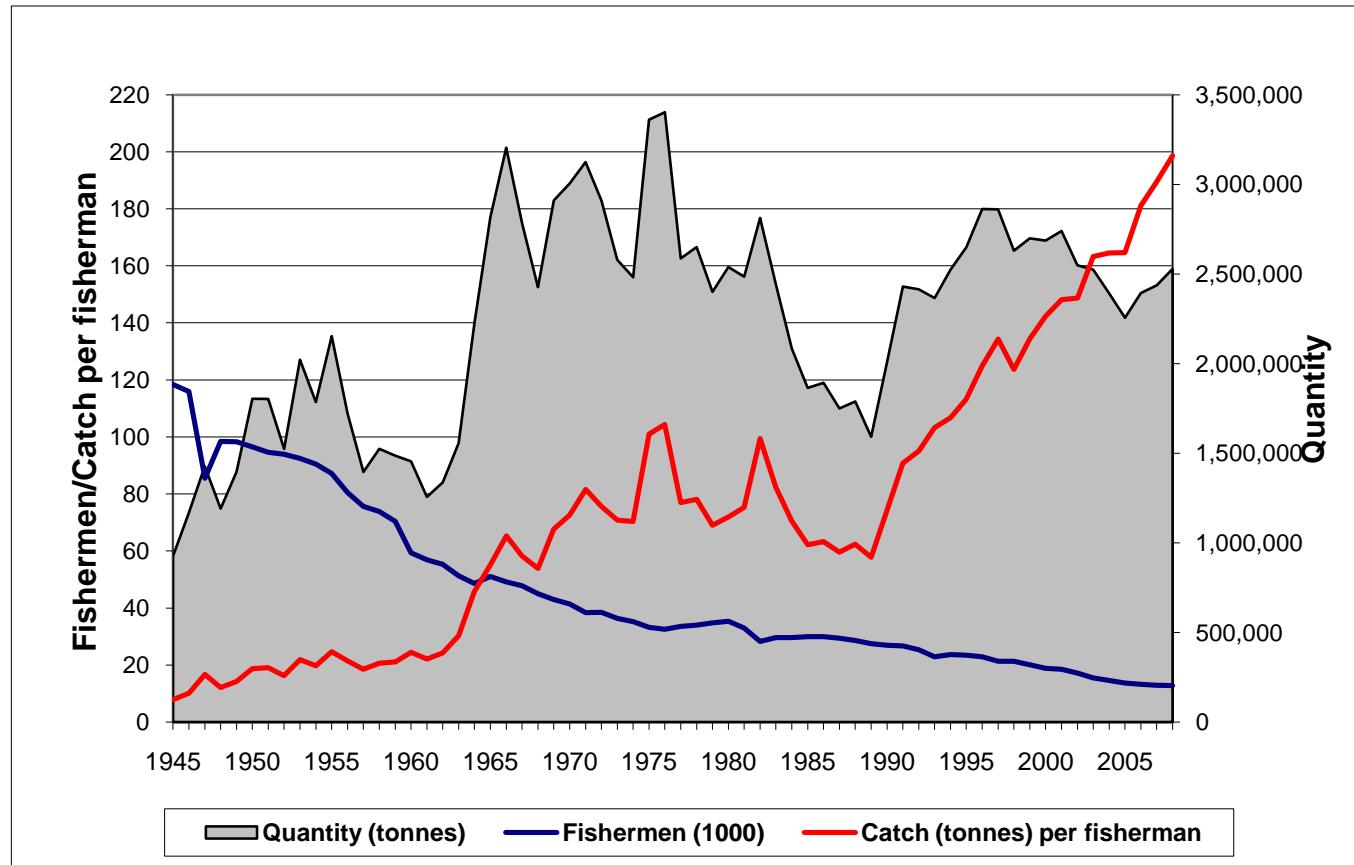
(1) e.g. Vessel capacity, cheap fuel, tax exemptions, access agreements

(2) e.g. Open access agreements allowing resource rents (profits) to be spent on increasing capacity

Estimated at between \$20 - \$50 billion p/a (**Source Rashid Sumaila**)

Norwegian catches versus fishers

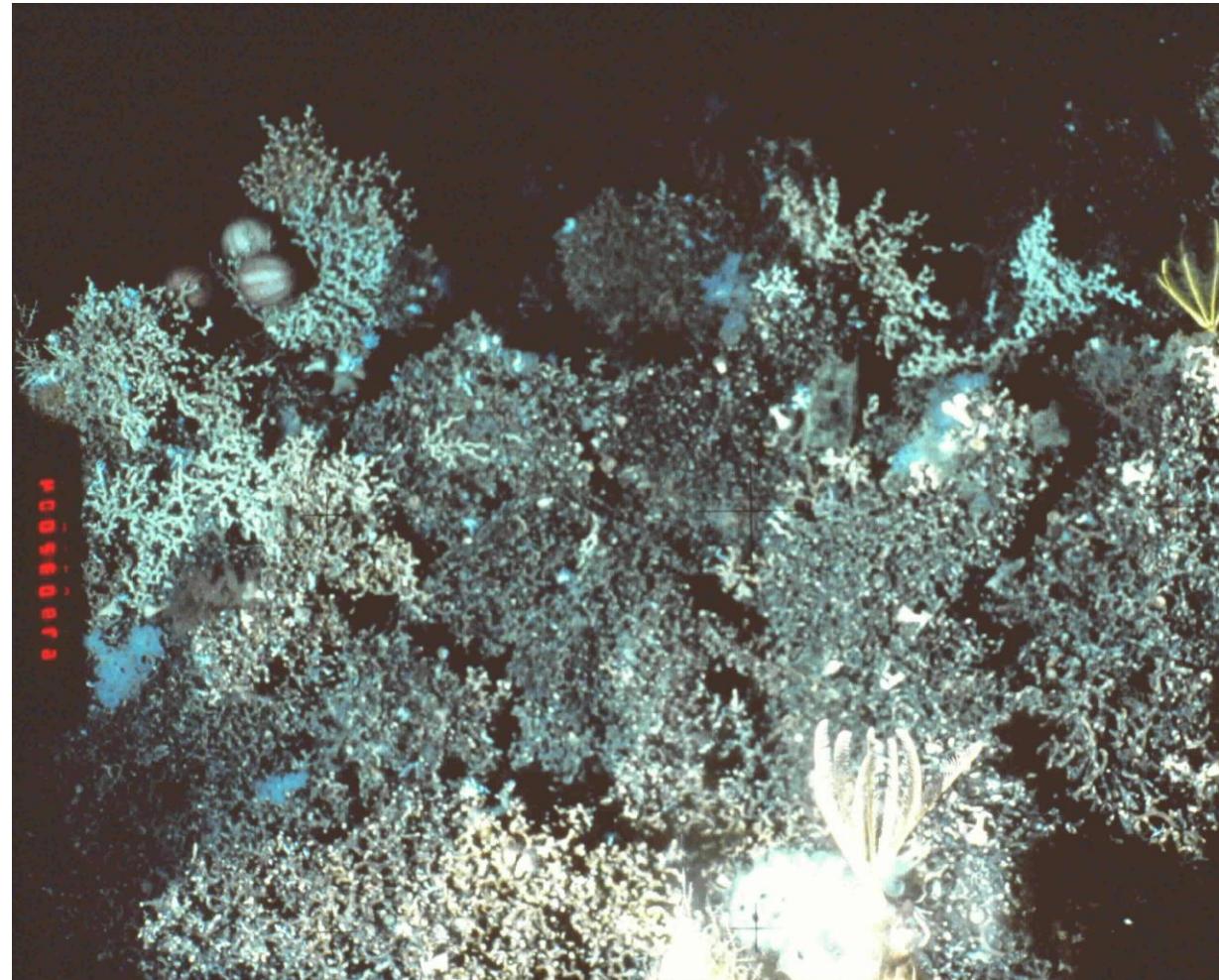
1945 - 2009





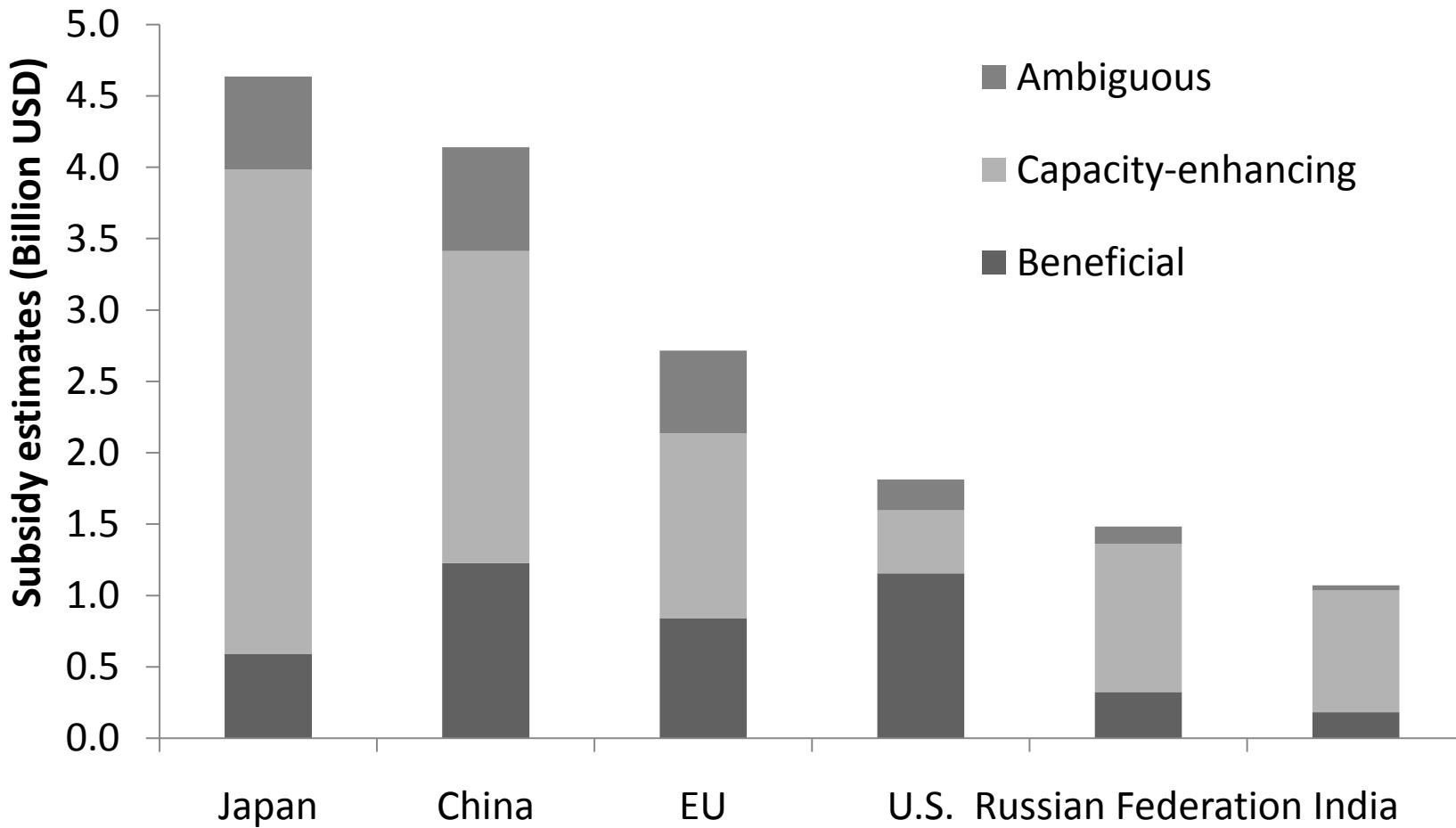
Integrated marine policy?

Eco system approach
Environmental impact assessments
Best practise principle
Precautionary approach
Polluter pays
Species protection
Marine protected areas



- **Implement international agreements:**
- All relevant countries should ratify and adopt robust implementing legislation for existing international marine and fishery agreements including:
 - United Nations Convention on the Law of the Sea (UNCLOS)
 - United Nations Fish Stocks Agreement (UNFSA)
 - United Nations General Assembly Resolutions 61/105 and 64/72
 - Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing
 - Food and Agriculture Organization of the United Nations (UN FAO) Code of Conduct for Responsible Fisheries.

Subsidies by major fishing nations



Retailers/consumers power?

全球及本地的漁業正面臨危機！您的選擇能改善現況！購買海鮮或出外用膳時，請使用本指引選擇可持續生產的海鮮。

Global and local marine fisheries are collapsing but your choice can make a difference. When buying seafood or dining out, you can use this guide to choose sustainably produced seafood.

Sustainable Fisheries certified by Marine Stewardship Council 認許管理委員會認證的可持续漁業。

查詢詳情，請瀏覽網頁：www.org.hk.

For more information, please go to www.org.hk.

如何使用
本指引將香港市面最常見的60多種海鮮分為三類類別：

- Recommended**: 這些是獲認可的海鮮！它們的捕撈/養殖的方法對環境影響最小。漁業會受到永續經營。
- Think Twice**: 購買這個類別的海鮮前請三思。雖然它們較「避免」類別，但由於其捕撈或養殖方法，以及漁業營運模式未臻完善，需求過多或會帶來問題。
- Avoid**: 避免購買這些海鮮。它們經過仔細地或是以破壞生態的方式捕捉或養殖，有關漁業的管理永久失當。

How to use
This guide groups more than 60 of the most popular seafood species in Hong Kong into 3 categories:

- Recommended**: Seafood on this list are recommended because they are caught or farmed in an ecologically friendly way, and fisheries are well managed.
- Think Twice**: While a better choice than those in the "Avoid" category, there are still some issues with the fishing or farming method, or fisheries management. Increased demand could affect sustainability.
- Avoid**: Avoid these seafood. They are over-exploited, caught or farmed in an ecologically unfriendly way and fisheries are not well managed.

WWF **'for a living planet'**
**海鮮選擇指南
Seafood Guide**
2007 Edition



DOMSTEIN TORSKEFILET

LINEFISKET/KROKFISKAD – BEARBEIDET I NORGE

KRAV
EKOLOGISK PRODUKTION GODKÄND AV
KONTROLLFÖRENINGEN FÖR EKOLOGISK ODLING

Miljøvennlig fisk

Serveringsforslag

400 g

The Future?



Thanks!

