



*Mundus  
maris*



# **Men and women in artisanal fisheries securing futures together with conservationists and scientists**

**Cornelia E Nauen**, Mundus maris asbl, Belgium

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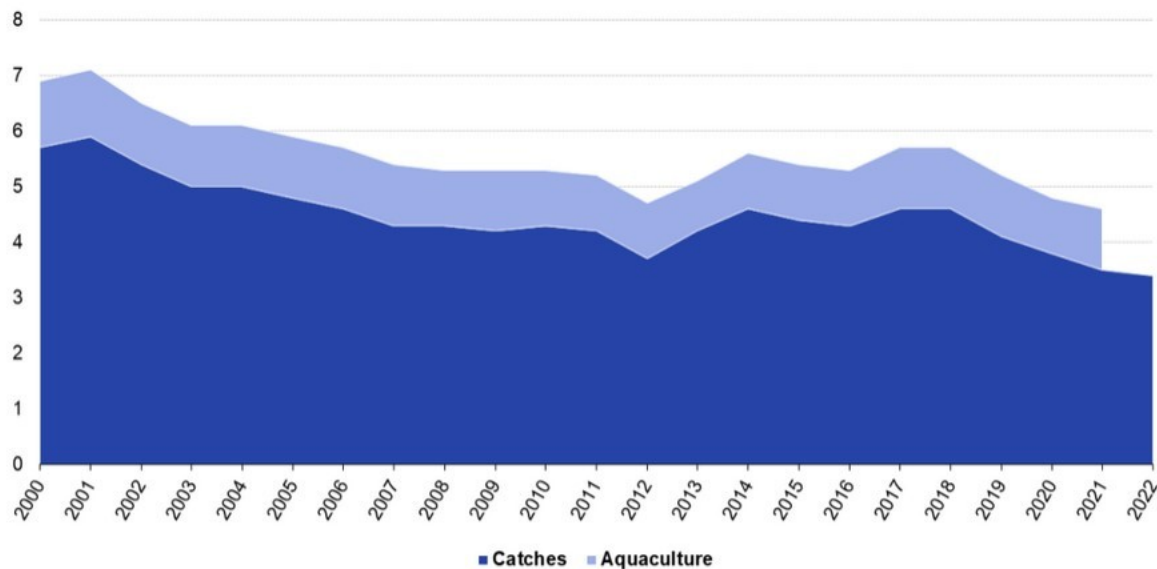


# EuroStat traces production

Production in European waters of wild caught fish goes down from 5.9 million tons in 2001 to 3.4 million tons in 2021/22.

Landings decrease even more – estimated at 3.2 million tons in 2022 - as discards are increasing significantly as numerous exceptions undermine landing obligations.

**Total production of fishery products**  
(million tonnes of live weight, EU, 2000-2022)



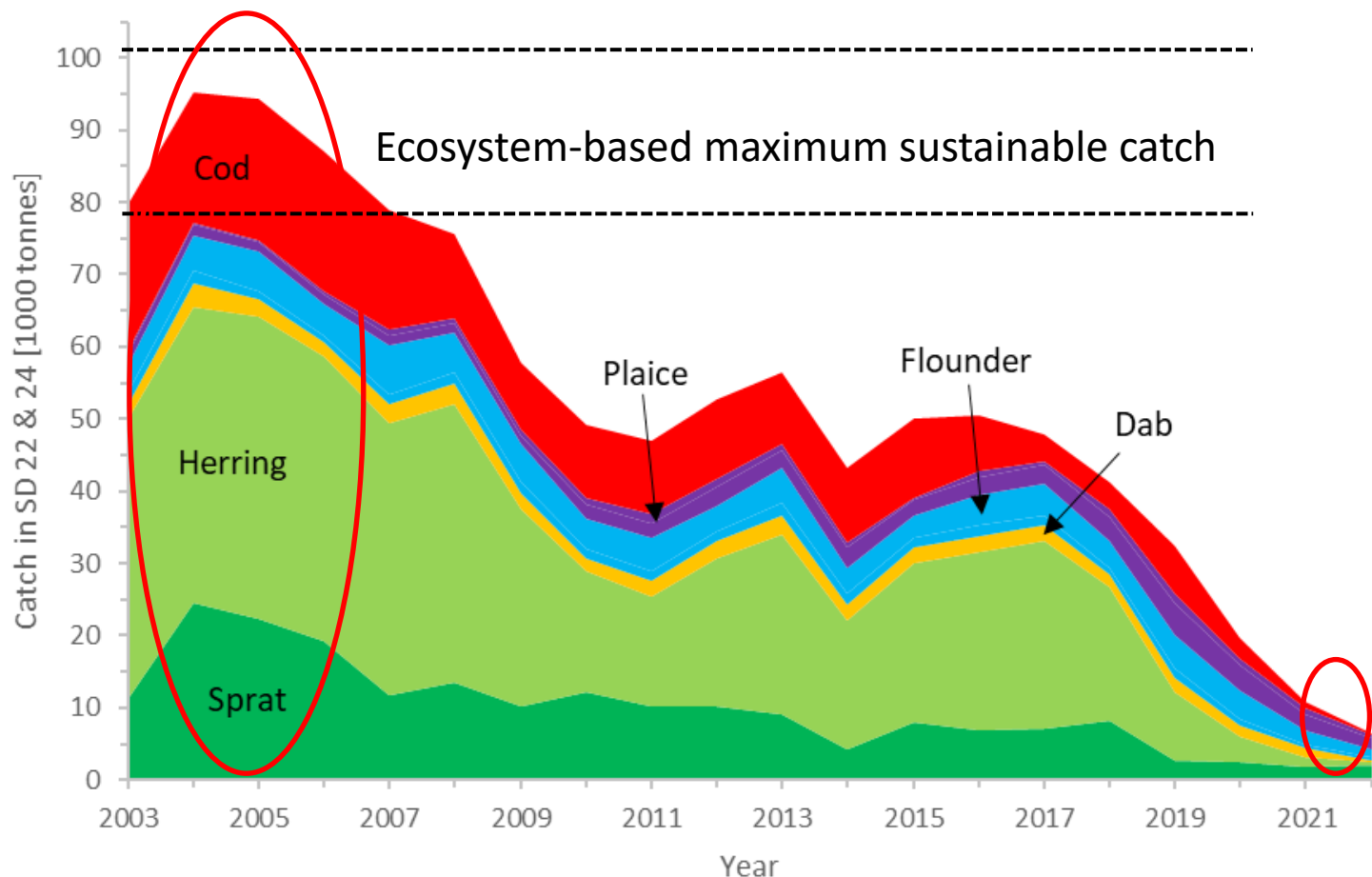


# Commercial fish catches, Western Baltic

Over the past 20 years, legal catches of cod, herring and sprat far exceeded productivity. That ruined the stocks and the fisheries.

Commercial flatfish (plaice, flounder, dab) were less strongly fished and are doing fine, despite warmer winters (climate change) and reduced oxygen (over-fertilization). But flatfish cannot replace cod, sprat and herring in the ecosystem and in the fishery.

Ecosystem-based maximum catch levels were realized in the early 2000s. Previous overfishing had reduced stock sizes below MSY-levels and prevented recovery.



Sources: WGBFAS 2023, HAWG 2023 [WBS\_Catch\_6.xlsx], adapted from Froese, 2024



# Defining ocean equity



## Recognitional equity

The acknowledgement and consideration of local rights, values, visions, knowledge, needs and livelihoods in policy and practice.



## Procedural equity

The level of inclusiveness and participation in decision-making and the embodiment of good governance principles.



## Management equity

The extent of local capacity for, leadership in and authority over management activities.



## Distributional equity

The degree of fairness in the allocation of benefits and the minimization of harms to local populations and among groups.



## Environmental equity

The safeguarding and maintenance of local environmental quality, sustainability and nature's benefits to people.



## Contextual equity

The extent to which broader contextual factors enable or undermine local social equity and the advancement of equity in policy and practice.

Bennett, N.J. (2022). Mainstreaming Equity and Justice in the Ocean. *Frontiers in Marine Science*, Vol. 9 DOI 10.3389/fmars.2022.873572



# Overconfidence in technology

Some technologies scale well, but unintended negative effects are often insufficiently accounted for.

The hype and rush for new technologies often starts with a global claim with little or no analysis of alternative options. Do we hand control over without assessing complex interactions and future effects not to mention human rights?

Jasanoff, Sheila (2016). *The Ethics of Invention: Technology and the Human Future*. W.W.Norton, 320 p. ISBN: 978-0-393-07899-2.

Pic: used in different sources







# Reconnecting people and planet

Approaches to managing social affairs usually do not scale as cues even from ubiquitous brands give rise to different responses in different localities and countries.

Harnessing a combination of traditional and indigenous knowledges and providing intelligible access to the sciences holds potential.



Jasanoff, S. (2004). Ordering knowledge, ordering society. Chapter 2 pp. 13-45 in Jasanoff, S. (ed.), *States of Knowledge: The Co-Production of Science and the Social Order*. Routledge





## Two small-scale examples in the Med



Coastal areas of the Maremma,  
Tuscany in Italy



Amorgos Island, part of the Cyclades  
Archipelago, Greece



# An example from Italy (1)

Illegal night-time trawling in the 3-miles coastal zone reserved for small-scale fishers made many give up, but not all. La Casa dei Pesci became a counter-proposal to set up obstacles to prevent trawling. The underwater museum with marble sculptures was instrumental to connect parts of the public with that environmental battle led by fishers.







## An example from Italy (2)

Example of a sculpture, here by Massimo Lippi. Marble blocks were donated by the Michelangelo quarries in Carrara after the owner went on a tourist fishing trip with Paolo Fanciulli learning about the destruction. The fisher is at the heart of looking for ways how to protect the environment while diversifying activities to remain viable with some fishing.







## An example from Italy (3)



Paolo Fanciulli diversifies his fishing with pescaturismo and catering around freshly caught fish in his garden during the tourist season.



## An example from Italy (4)



Artists such as sculptor Emily Young (Guardian, left) and scientists, Letizia Marsili of Siena Univ., support the Casa dei Pesci. Two journalists wrote a book about the initiative and numerous tv transmissions helped to share it with wide publics.





## An example from Italy (5)

Overfishing is still rampant.

Reduction of fish biomass creates more space for invertebrates.

Cephalopods have increased biomass and are high value.

Overfishing them is looming, therefore

Casa dei Polpi is a new initiative to provide shelter.

Women support strongly from outside fishing.



*Polpessa - Callistoctopus macropus*



### LA CASA DEI POLPI

L'iniziativa sperimentale, che si svilupperà nell'arco di diversi anni, vuole offrire ai polpi nuovi rifugi, attraverso





## An example from Italy (6)

Governments have agreed on the Global Biodiversity Framework in Dec. 2022. Among the many measures to counter mass extinctions is to protect 30% of the land and the sea for recovery.

Do the fishers around Casa dei Pesci / Polpi want to establish a marine protected area?

They are not keen as they fear ineffectiveness of official institutions. But their own organisation is not very strong either.





# An example from Greece (1)

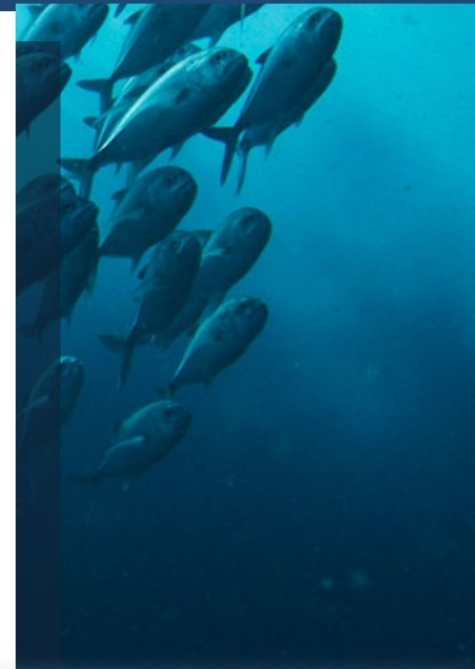
AMORGORAMA

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## CLEAN COASTS, MORE FISH, A HEALTHY ENVIRONMENT

Cleaning the coasts from plastic and giving marine life time to regenerate—that's what Amorgorama wants to achieve. With your help, we can do it.



With the project Amorgorama the Professional Fishing Association of Amorgos aims to find a sustainable approach to tackle both the problems of a continuously increasing plastic pollution as well as of overfishing in the Aegean Sea.





## An example from Greece (2)

Michalis Croessmann,  
President of the Fishing  
Association of Amorgos

- Founded 2003
- 2015 seeking support for countermeasures against overfishing and plastic pollution
- inspiration from a Turkish community
- supporters Municipality of Amorgos, the Cyclades Preservation Fund and the Blue Marine Foundation, Enaleia, & Prasino Tameio





## An example from Greece (3)

During 2021 and 2022, all together they managed to:

- Realise 38 missions for garbage collection – that means 38 fewer days of fishing during the fish reproduction period!
  - Collect more than 1200 large bags of litter, plus many very big items.
  - Send more than 15 tons of plastic for processing, where 60-65% will eventually be recycled.
  - Recycle more than 3 tons of fishing nets and ropes!
- (<https://amorgorama.com/documentation/>)







## An example from Greece (4)

Memorandum of Cooperation 2022

Long-term commitment from all parties involved

- Quantitative and qualitative assessment by the Athens Agricultural University of the distribution and abundance of fish species in the vital Posidonia meadows.
- Determine protected areas.
- 2024 at 'Our Ocean' event in Athens, formal launch of three protected areas based on fisher knowledge and confirmed by scientific study.

Standing: the women representing financial support





## An example from Greece (5)

Some initial take-home messages

- Great investment into consolidating the fisher organisation – though initially only half of the 40 members actively participated in garbage collection
- Seek local institutional support (municipality)
- Seek national and European support
- Seek public support (crowd funding) and through environmental NGOs/Foundations
  
- Steering the course despite difficulties attracted youngsters to join
- No explicit emphasis on gender, but women supported the initiative – family and many environmental NGOs and initiatives have female leadership
- Necessity on the island to step in for public service is more developed than on mainland







# Amplifying interesting initiatives

- Whenever there is a chance, strengthen SSF Organisations and collective action
- Unrealistic to change policy preference for industrial operations on their own - thus
- Build broader coalitions with conservation organisations, small-scale farmers, women's organisations; enhances chances, but requires openness to others, while firm on one's own identity; accept it's hard work, willingness to learn, also recognise women as equal
- Women in SSF are sometimes better than men in co-creation of new knowledge to tackle new challenges – social networks and trust are key
- Enhance preparedness for adverse effects, that reduces negative impacts, even if we assume that we mostly react to crises and disasters rather than prevent them; emphasise cultural heritage
- Connect international agreements to local experience to enhance agency and confidence





# Small selection of literature

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# Thanks for your attention

More Info:

[www.mundusmaris.org](http://www.mundusmaris.org)

[info@mundusmaris.org](mailto:info@mundusmaris.org)

