

Making MPAs work

Rashid Sumaila

Fisheries Economics Research Unit

Global Fisheries Cluster

Institute for the Oceans and Fisheries

The University of British Columbia

Vancouver, Canada

r.sumaila@oceans.ubc.ca

@DrRashidSumaila



OCEAN The National Advisory Panel on MPA Standards
CANADA

Vancouver, April 7, 2018

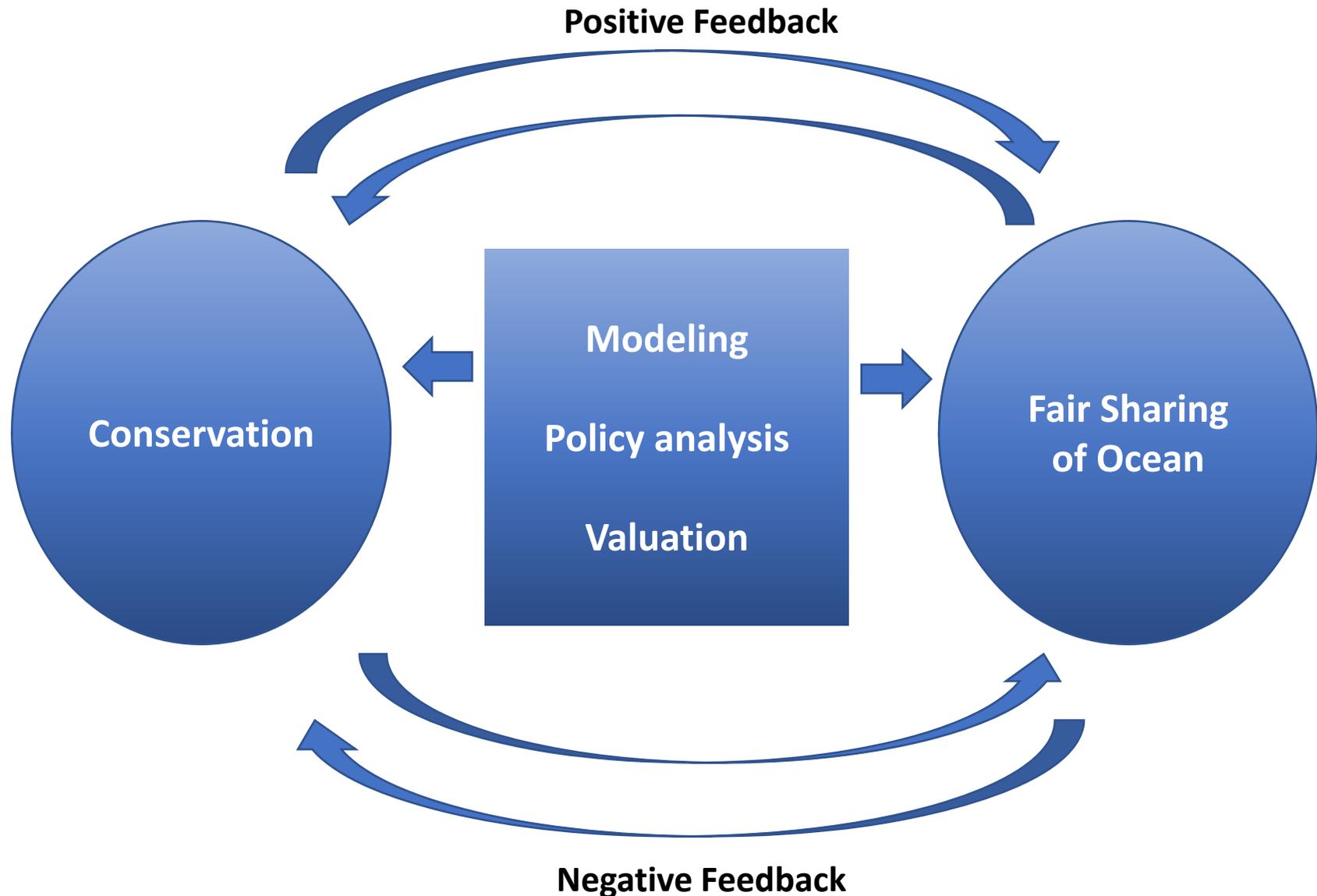


Setting the stage

- Thanks for the invitation;
- Focus on two of the questions posed by the Panel:
 - On what do I base my talk and suggestions?
 - What role do indigenous approaches play in shaping my suggestions?

Me and my research

Ocean and fisheries economics



My work is policy-relevant, I am not just a theoretical economist



The OceanCanada Partnership



Special thanks to SSHRC ...

Why do we want MPAs that work?

The ocean is too large to ignore

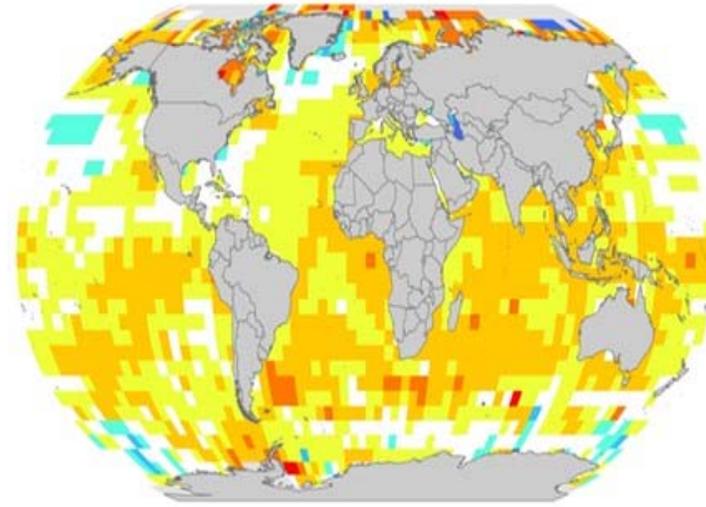
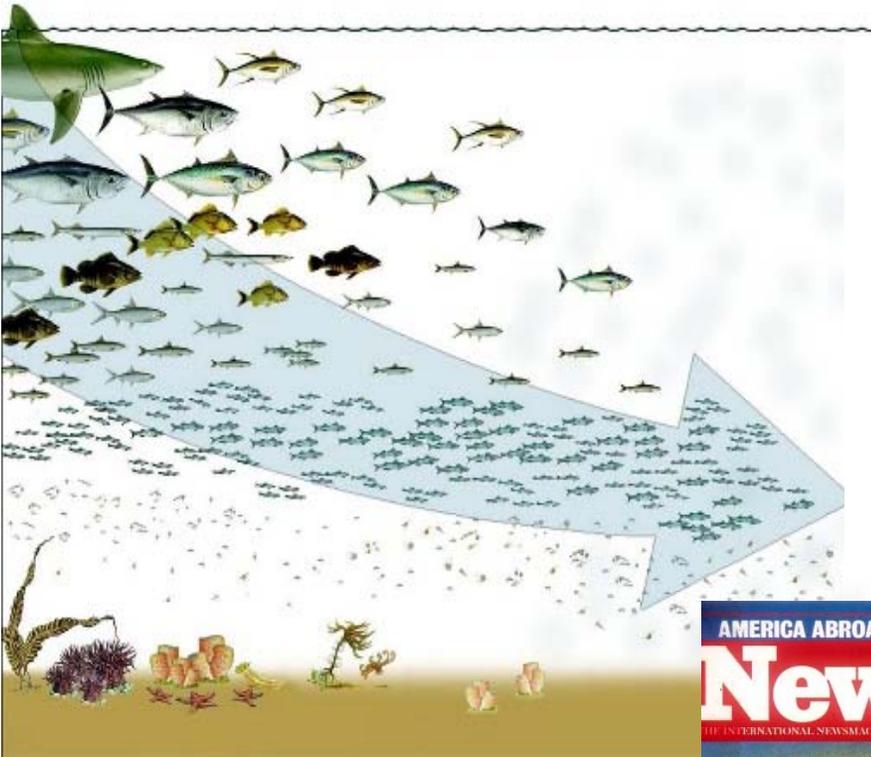


Source: <http://www.environment-prize.com/laureates/by-year/2017/rashid-sumaila/>

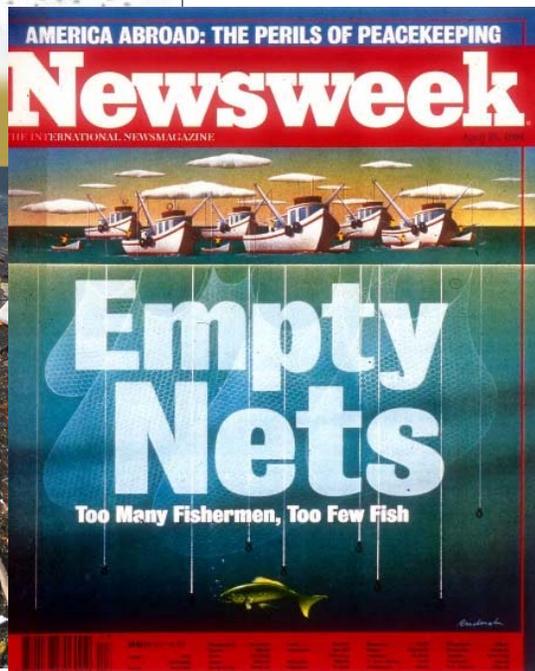
The ocean is crucial for our survival



Our oceans are under threat ...



SST Change (degree C)
average 1988-2007 relative
to 1950-69



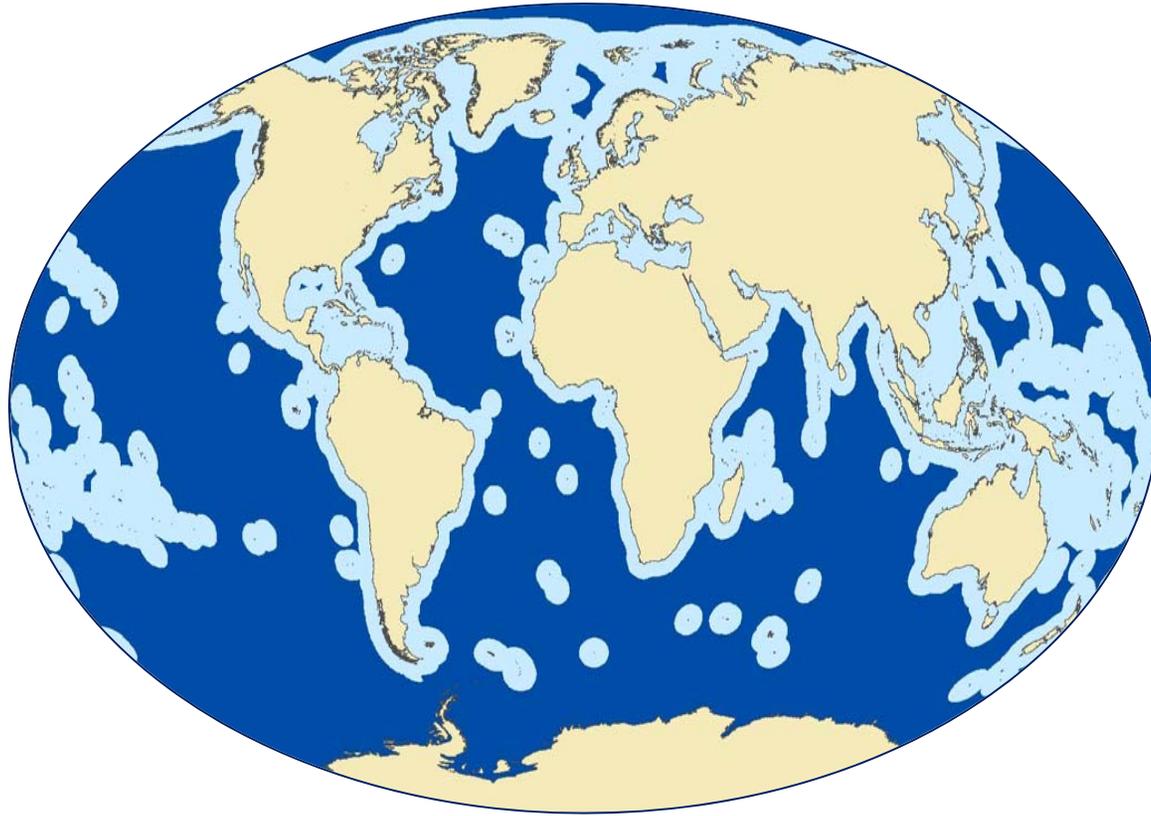
Human-Ocean interaction

Marine Environment



Fish Economy

There is only one global ocean



What you do in one part of the ocean can influence the availability of fish to fleets in other parts.

Exclusive economic zones (light blue) and high seas (dark blue)



OPEN ACCESS

PERSPECTIVE

Close the High Seas to Fishing?

Crow White , Christopher Costello

Published: March 25, 2014 • DOI: 10.1371/journal.pbio.1001826

White & Costello (2014)

OPEN

Winners and losers in a world where the high seas is closed to fishing

U. Rashid Sumaila¹, Vicky W. Y. Lam², Dana D. Miller¹, Louise Teh¹, Reg A. Watson³, Dirk Zeller², William W. L. Cheung⁴, Isabelle M. Côté⁵, Alex D. Rogers⁶, Callum Roberts⁷, Enric Sala⁸ & Daniel Pauly²

SUBJECT AREAS:

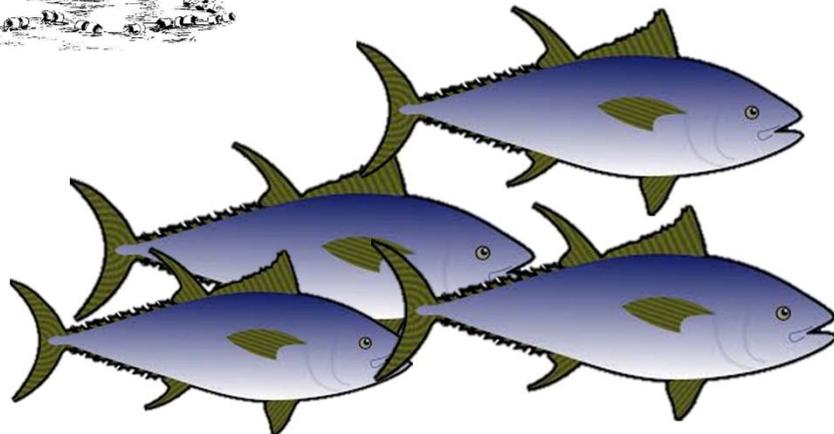
CONSERVATION BIOLOGY

ENVIRONMENTAL ECONOMICS

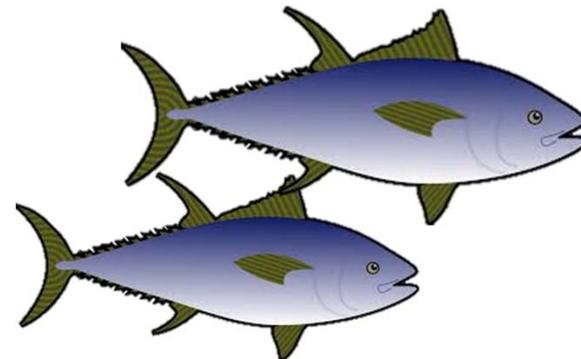
Sumaila *et al.* (2015)



Effective MPA

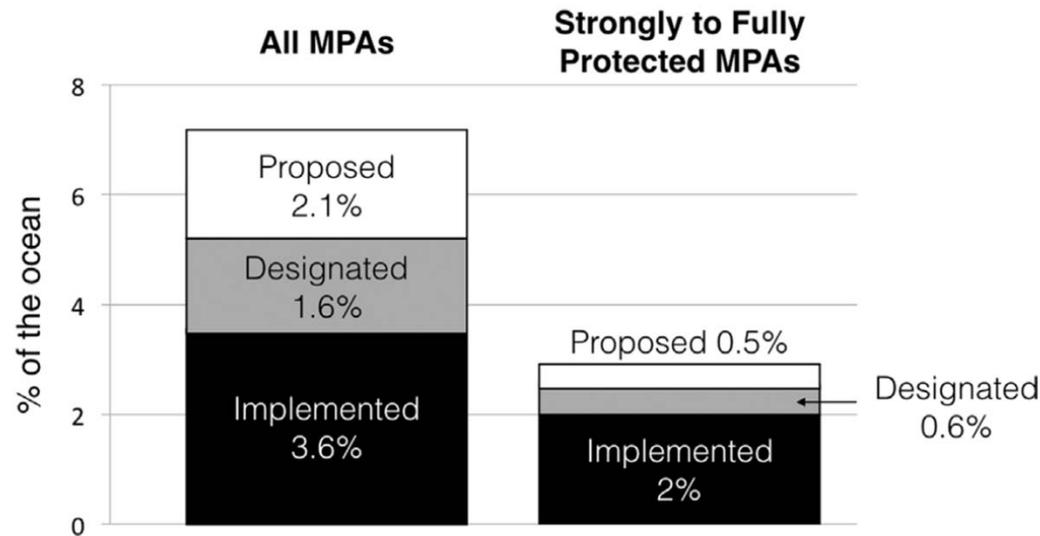


High seas



EEZ

How far are we from the Aichi Target of 10%?



Designated ocean spaces within which human activities are **regulated** more stringently than elsewhere:

(i) 'no-take', and (ii) 'zoned' areas.

Only **2%** of the ocean is in **implemented** strongly or fully protected areas.

Slide 13

S5

Delete. talk about subsidies and show a photo.

SaterMC, 9/1/2016

Proposed Standards/Measures for making MPAs work

Standards must satisfy the intent of the Signatories to the Aichi Targets

- The following statement makes clear the intent:

“To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity,”

- Comments on stated intent:
 - MPAs can have other important goals such as making fishing more sustainable, but that is not the same as biodiversity protection.
 - Extractive activities generally tend to *degrade* biodiversity instead of *improve* it;
 - Areas that allow anything more than very minimal fishing or other extractive activities cannot safeguard the biodiversity in a given place, and these should not count towards the CBD target.

Standards must satisfy the intent of the Signatories to the Aichi Targets

- Scientific Consensus Statement on MPAs:
 - 1) What are the characteristics of MPAs that will make them most effective at conserving biodiversity and regenerating fish populations?
 - 2) What governance structures might best support the successful implementation and management of MPAs?
 - 3) How can MPAs be made financially self-sustaining?
- The Consensus Statement outlines points of agreement in each of these topic areas by the experts who participated in the conference.
 - I have a copy for each of you;
 - For the rest of my presentation, I will highlight a few of the points of the Statement.

Characteristics of MPAs

- MPAs work best when they are fully protected from exploitation and other sources of harm. They do not work well when they receive only light protection. The delivery of benefits is tightly and positively linked to the level of protection given;
- The most effective MPAs target protection to the ecosystem level, encompassing a wide spectrum of biodiversity, rather than a few species;
- Marine protected areas require a long-term commitment;
- The benefits of MPAs are proportional to their coverage;
- MPAs should be as large as possible, appropriate to the location;
- In selecting sites for MPAs, some places have enormous global significance that transcends local importance and should be protected as a matter of priority under any national or international selection scheme;
- The biggest gap in the global MPA system is on the high seas, beyond the limits of national jurisdiction.

Governance structures

- MPAs will only be fully effective when embedded within a holistic framework of integrated ocean and coastal management;
- MPAs must have the governance capacity to influence the behavior of people to build on common interests, address conflicts and reduce use impacts to levels that promote the effective achievement of conservation objectives;
- Recognize that “diversity is the key to resilience, both of species in ecosystems and incentives in governance systems”;
- Legal incentives and the capacity to enforce them are particularly important to achieve both effectiveness and equity, and sufficient political will to agree and apply appropriate laws and regulations is essential for MPAs success;
- Involve stakeholders – indigenous peoples, local communities in order to ensure local stewardship and the protection/creation of livelihoods.

MPA economics and financing

- MPAs are critical to long term sustainable development;
- MPA governance must ensure effectiveness in achieving conservation objectives and equity in fairly distributing their costs and benefits;
- Investments in MPAs can strengthen the provision of marine ecosystem services on which coastal communities depend;
- MPAs provide insurance and protection from risk;
- Canada and indeed all maritime countries need to invest in institutions and policy frameworks, incentives and economic instruments for MPA implementation;
- MPA financing should be sought from a wide variety of sources.

The role of indigenous approaches in shaping my suggestions

- **The Seventh Generation Principle** is based on an ancient Iroquois philosophy that the decisions we make today should result in a sustainable world seven generations into the future:
 - Being comprehensive;
 - Thinking long term.

