

Transdisciplinary Perspective on Ocean Governance

Ratana Chuenpagdee

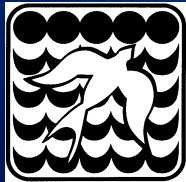
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China-ASEAN Academy on Oceans Law and Governance

Third Program

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Three objectives

- Governance vs. management
- Ocean governance as a wicked problem
- What, why and how of transdisciplinarity in ocean governance

What is governance?

Some basic definitions

World Bank's definition

Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.

Global Governance's definition

Governance refers to mechanisms, processes and institutions through which public and private sectors articulate their interests, exercise their rights, meet their obligations and mediate their differences in order to make decisions affecting society.

(Source: Rosenau, 1999)

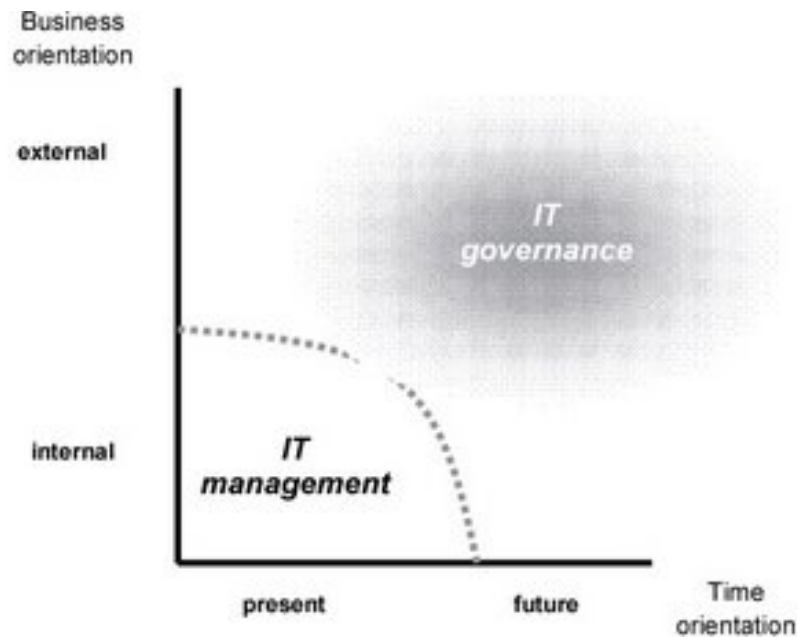
Governance vs. Management

(1) Governance > management

(2) Governance > government



Governance vs. Management



IT management is focused on the effective and efficient internal supply of IT services and products and the management of present IT operations. IT governance, in turn, is much broader and concentrates on performing and transforming IT to meet present and future demands of the business (internal focus) and business customers (external focus).

Types of governance

- Participatory
- Collaborative
- Adaptive

Mode of governance

- Hierarchical (top-down)
- Co-governance
- Self-governance

‘Interactive Governance’



Edited by
Jan Kooiman
Maarten Bavinck
Svein Jentoft
Roger Pullin

Fish for Life

Interactive Governance
in Fisheries

AMSTERDAM UNIVERSITY



Governability of Fisheries and Aquaculture

Governability
of Fisheries and
Aquaculture

Theory and Applications

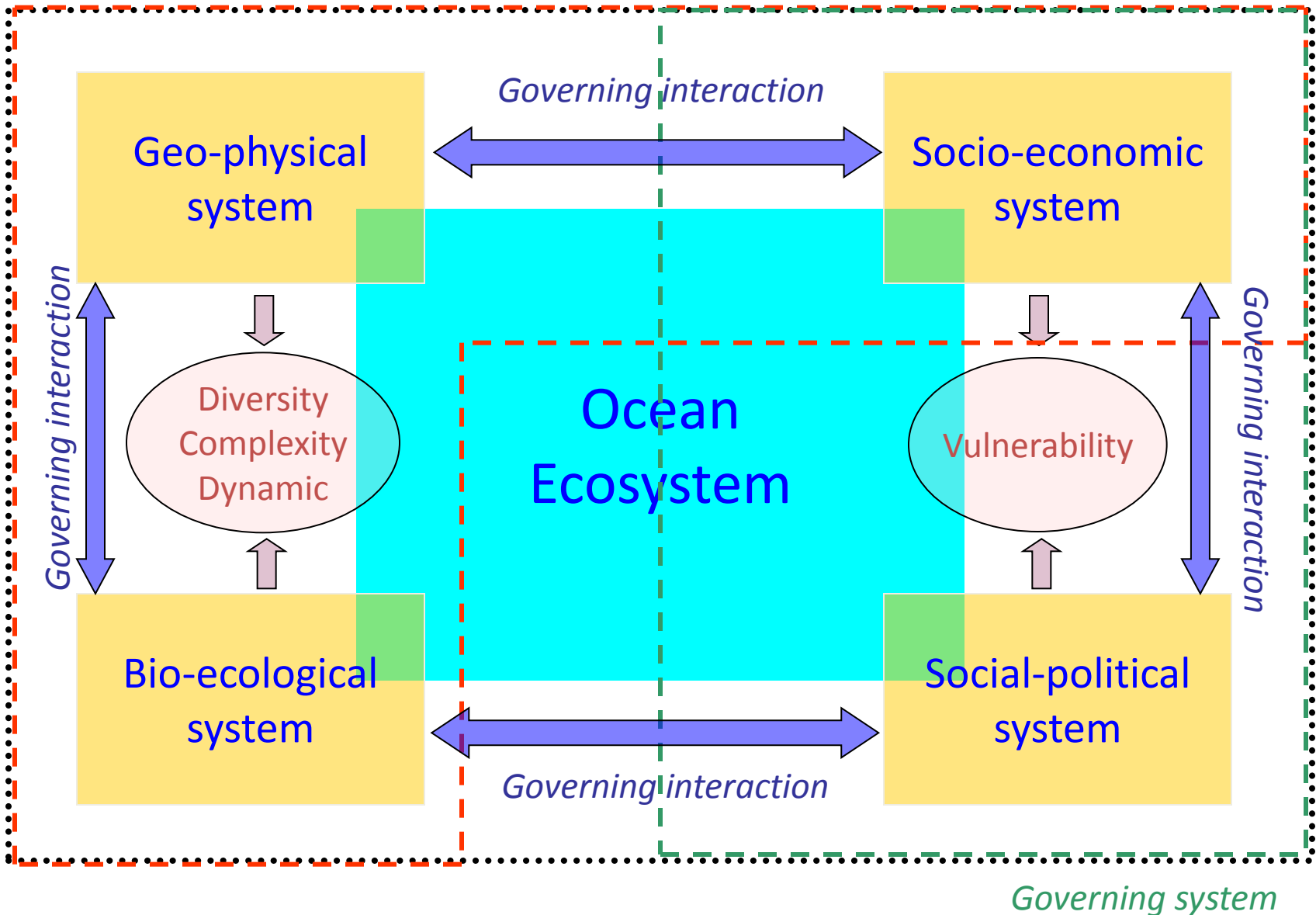
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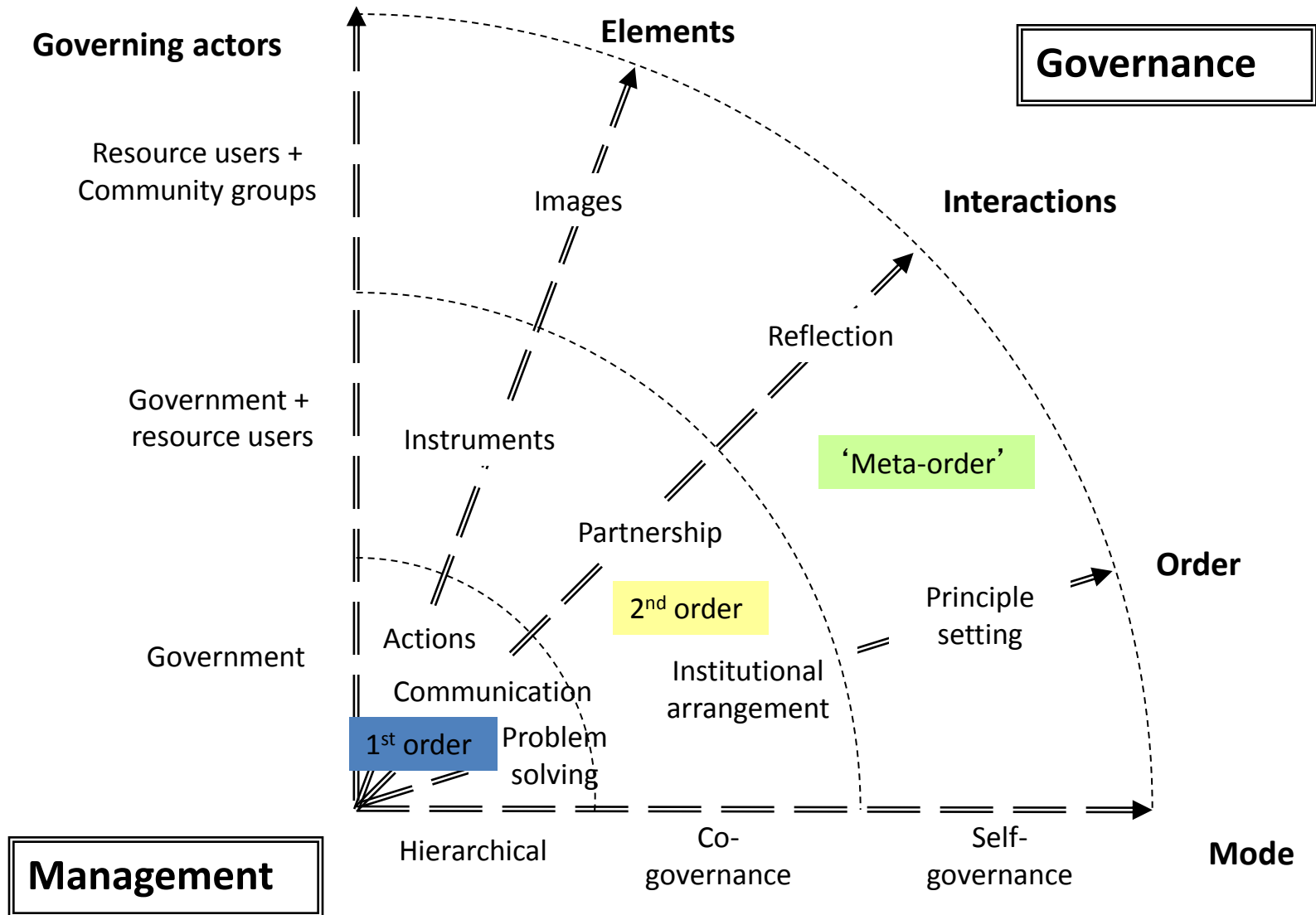
- *“The whole of public as well as private interaction taken to solve societal problems and create societal opportunities. It includes the formulation and application of principles guiding those interactions and care for institutions that enable them.”* (Kooiman et al. 2005:17)
- Emphasizes interactions between public and private sectors in solving problems and creating opportunities (*1st order*), in the design and maintenance of institutions (*2nd order*), and in formulation and application of principles guiding those interactions (*meta-order*) (Chuenpagdee 2011).

Systems-to-be-governed

Interactive Governance Model

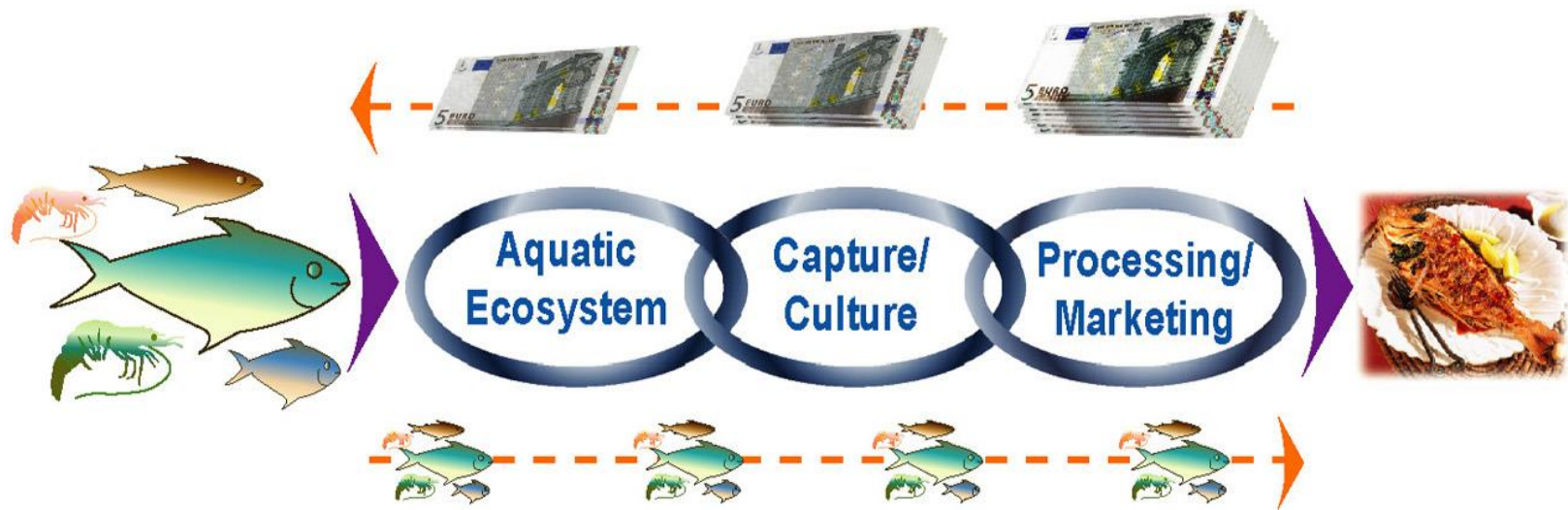


Interactive governance model – in a nutshell



The fish chain analysis

Considering interconnectivity and dynamics throughout the entire chain



(Kooiman et al. 2005:17)

Ocean governance as a wicked problem

What is a wicked problem?

Rittel and Webber (1973): 'Dilemmas in a General Theory of Planning'

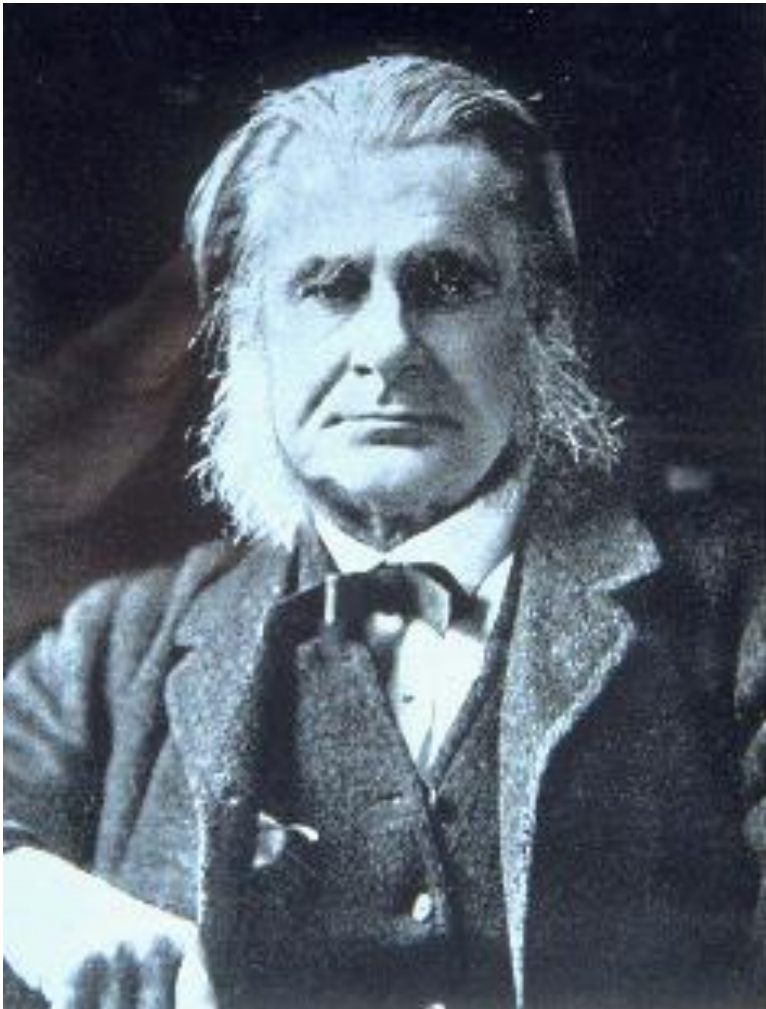
- 'Social problem' vs. 'Scientific problem'
- Difficult to define and differentiate from other problems
- No formula, no stopping rule
- No solution, only *resolution*
- All problems are unique
- Mistakes are costly



What makes ocean governance a wicked problem?

- Diversity, complexity, dynamics
- Scale issues
- 'KUU' issues and uncertainty
- Climate change makes ocean governance a 'super wicked' problem!
- Different (governance) images

Marine/fisheries ecosystem: image



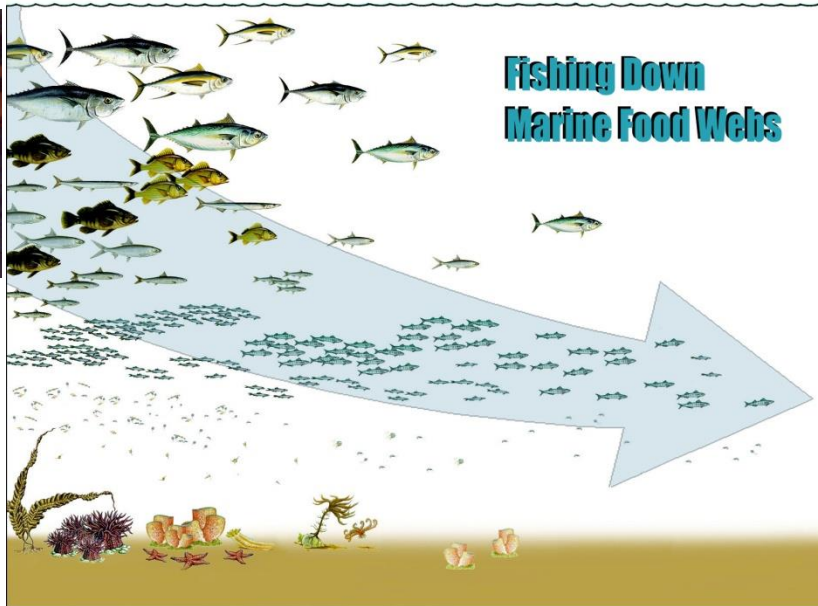
“I believe that the cod fishery, the herring fishery, the pilchard fishery, the mackerel fishery, and probably all the great sea-fisheries are inexhaustible; that is to say, nothing we can do seriously affects the number of fish”

Huxley (1883)

Marine/fisheries ecosystem: Image Crisis/over-fishing vs. Healthy/sustainable



*Pauly et al.
(Science,
1998)*

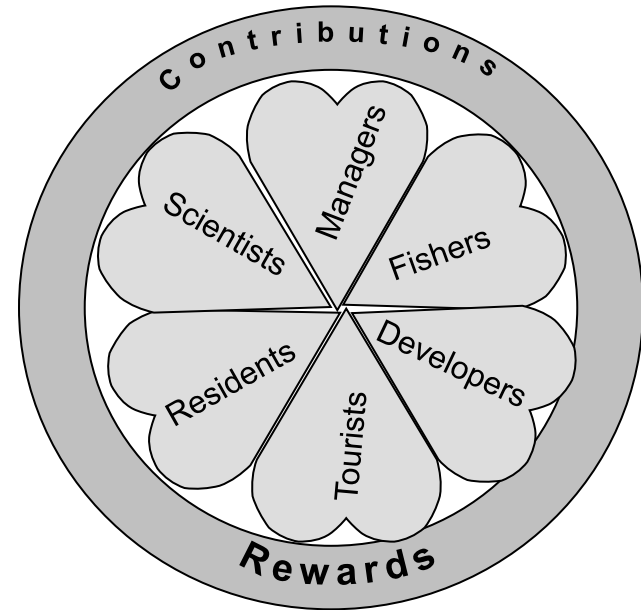
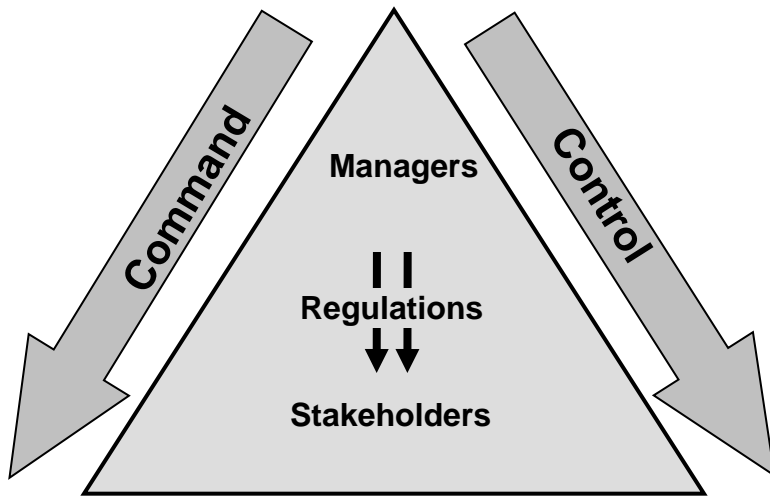


Apocalypse Forestalled: Why All the World's Fisheries Aren't Collapsing

By Ray Hilborn, Professor, Aquatic and Fishery Sciences, University of Washington

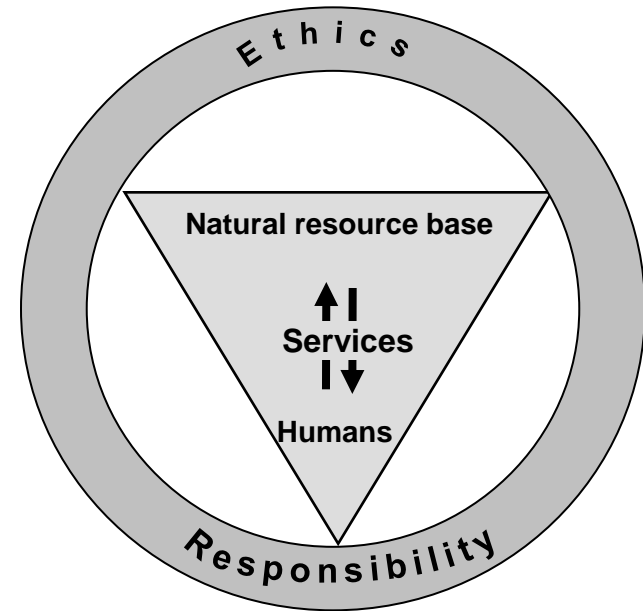
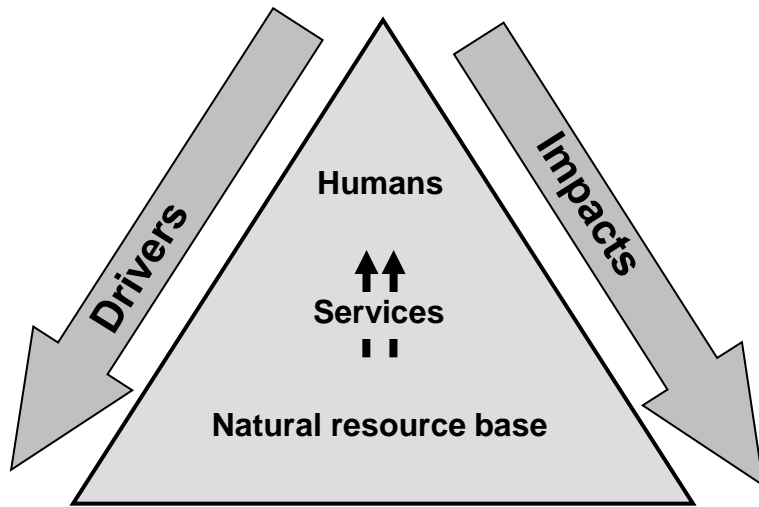
*Hilborn (Science
Chronicle 2010)*

Images of the governing system



Jentoft et al. (2010)

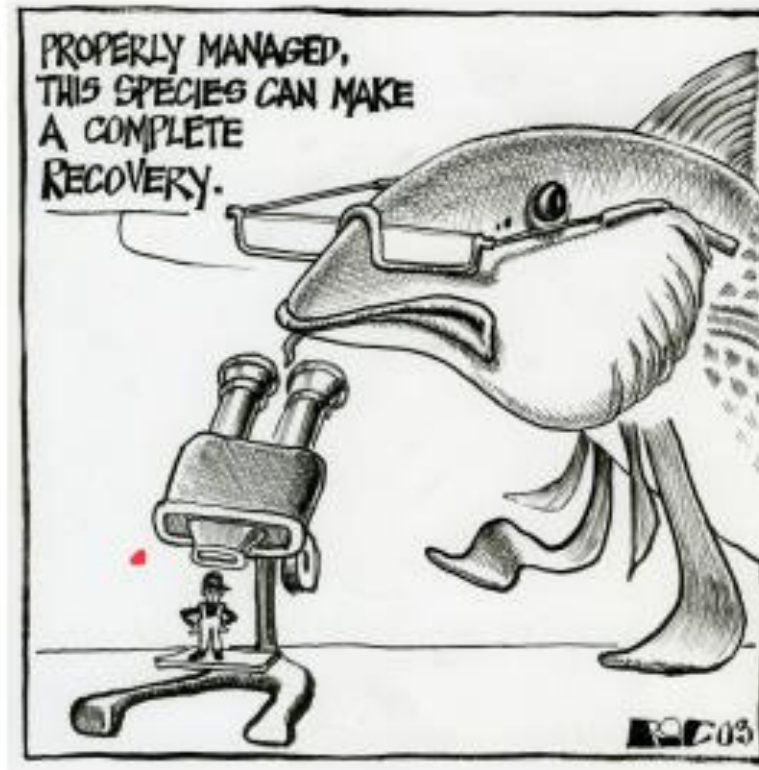
Images of the system-to-be-governed



Bundy et al. (2008)

Images of the governing system about the system-to-be-governed

Complex Fish, Simple People



Fishermen haven't changed much over the last 50 years, and won't change much for the next 500 either (Larkin 1988)

(Courtesy of Dean Bavington @ MUN)

Group report topics

- 1) Managing Safety and Security in the Straits of Malacca
- 2) Managing Marine Protected Areas in the Bay of Bengal
- 3) Managing Water Quality in the Java Sea
- 4) Shared Fishing Access in the South China Sea
- 5) Managing the Mekong Delta
- 6) Adaptation to Climate Change in the Coral Triangle
- 7) Priorities for the Blue Economy in the ASEAN region
- 8) Impacts of the Maritime Silk Road on the Ocean



Transdisciplinary perspective in ocean governance

Why a transdisciplinary perspective?

- Some issues/problems are too complex to address from one dimension or a single perspective;
- Scientists may not have all the answer and may require inputs from 'lay' experts;
- Collaborative/participatory process may lead to better outcomes;
- New theory/methods/tools, or new disciplines, may be necessary.

Key points about transdisciplinarity

- Transdisciplinary perspective as an **option**, not a solution;
- Research and policy that go between, across and beyond certain disciplines or knowledge 'all at once' in order to create a **holistic** approach to address complex societal problems;
- Problem-based, issue-driven;
- It may result in science that not only informs, but also **transforms** society;
- It can be close or '**open**', i.e. involving non-academics in the co-identification of the problem, co-design and co-implementation of possible options; and co-production of knowledge.

Problems with technical fixes



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Marine Policy 30 (2006) 534–543

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Painting the floor with a hammer: Technical fixes in fisheries management

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^a*Institute for Fisheries Management and Coastal Community Development (IFM), The North Sea Centre, 9850 Hirtshals, Denmark*

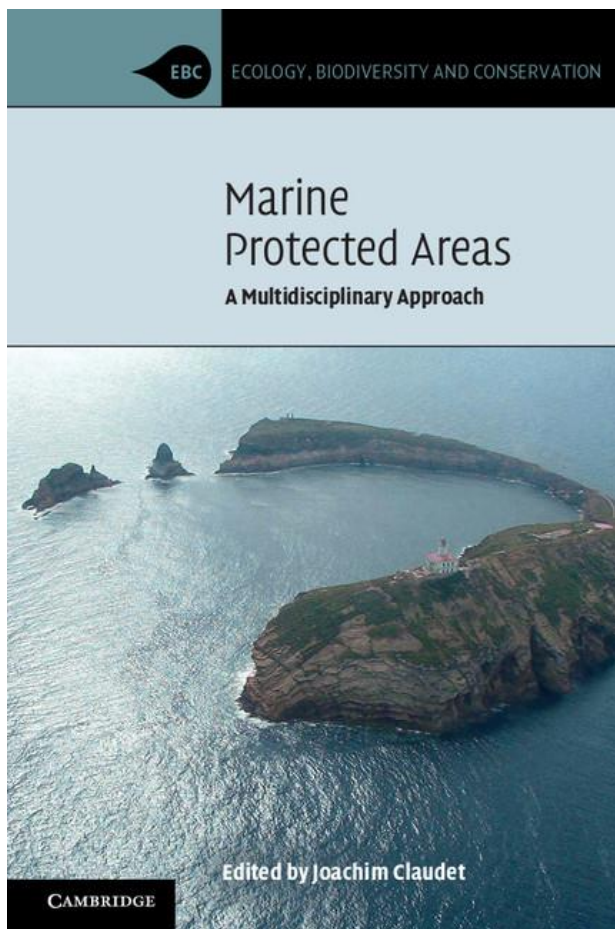
^b*Copenhagen University and the Danish Institute for Fisheries Research, Charlottenlund, Denmark*

^c*Department of Agricultural and Resource Economics, Oregon State University, USA*

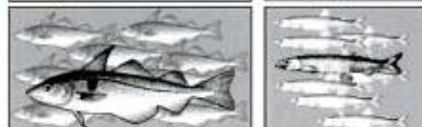
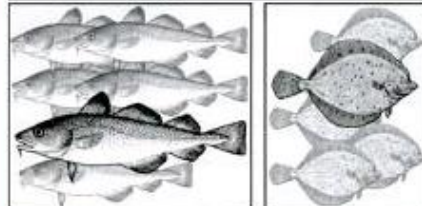
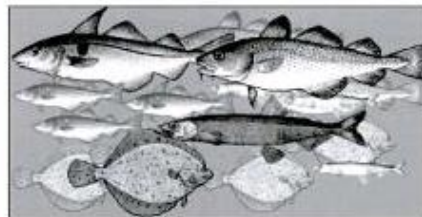
^d*The Norwegian College of Fishery Science, University of Tromsø, Norway*

Received 26 May 2005; accepted 24 July 2005

Classic technical fixes: MPAs, ITQs, CBM



Case studies on the allocation of transferable quota rights in fisheries



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Food
and
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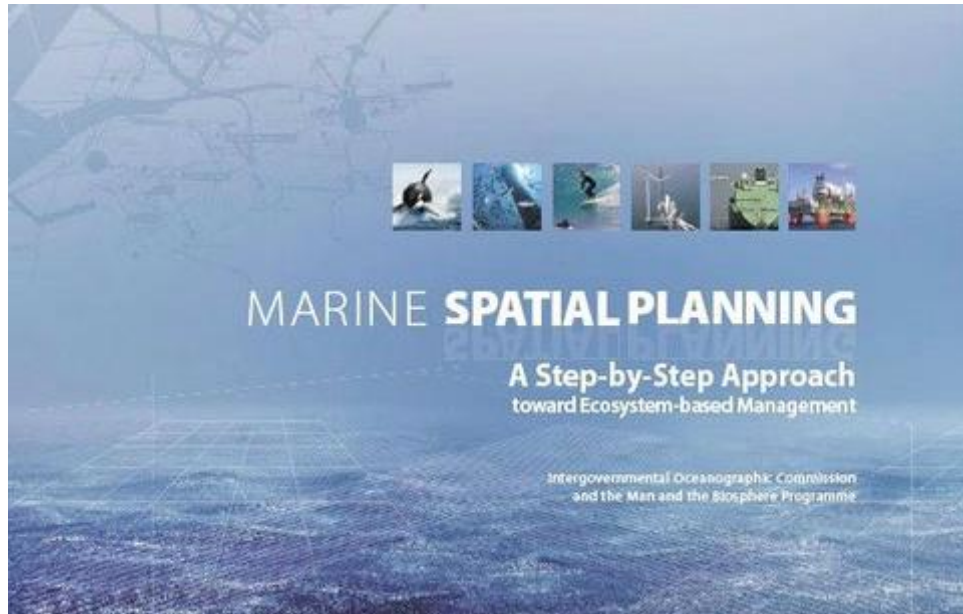
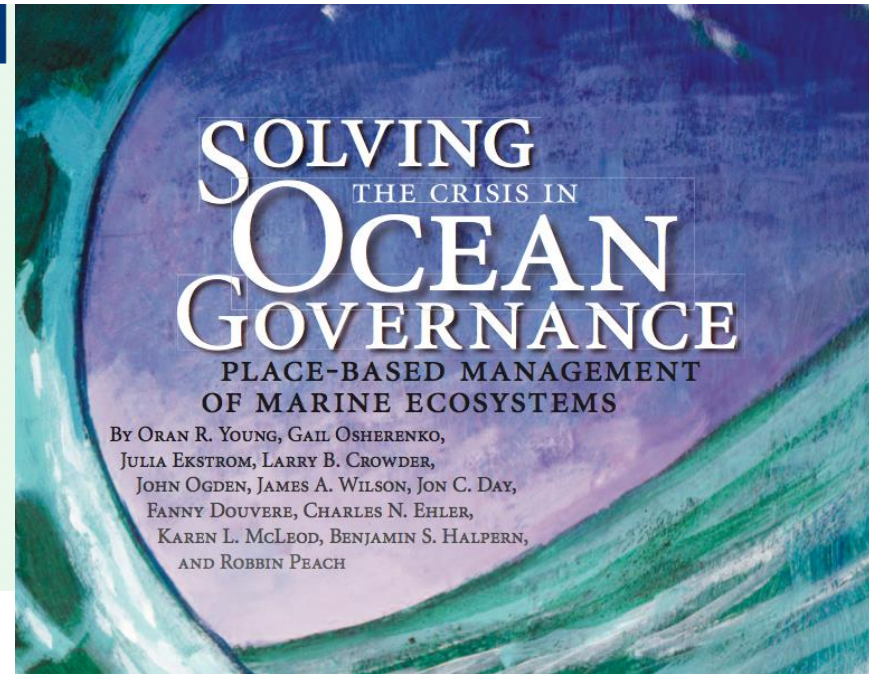


Contemporary fixes

Agenda 21 (1992)

Ecosystem Approach and Integrated Management

- ◆ Provide for a cross-sectoral integrated policy and decision-making process, including national ICM guidelines, based in the precautionary approach, and systematic observation of the marine environment.
- ◆ Establish, or where necessary strengthen, appropriate coordinating mechanisms and legal and regulatory frameworks for integrated management
- ◆ Support the role of international cooperation and coordination on a bilateral, regional, or global basis in supporting and supplementing national efforts to promote integrated management and sustainable development of coastal and marine areas.



EBM

EAF

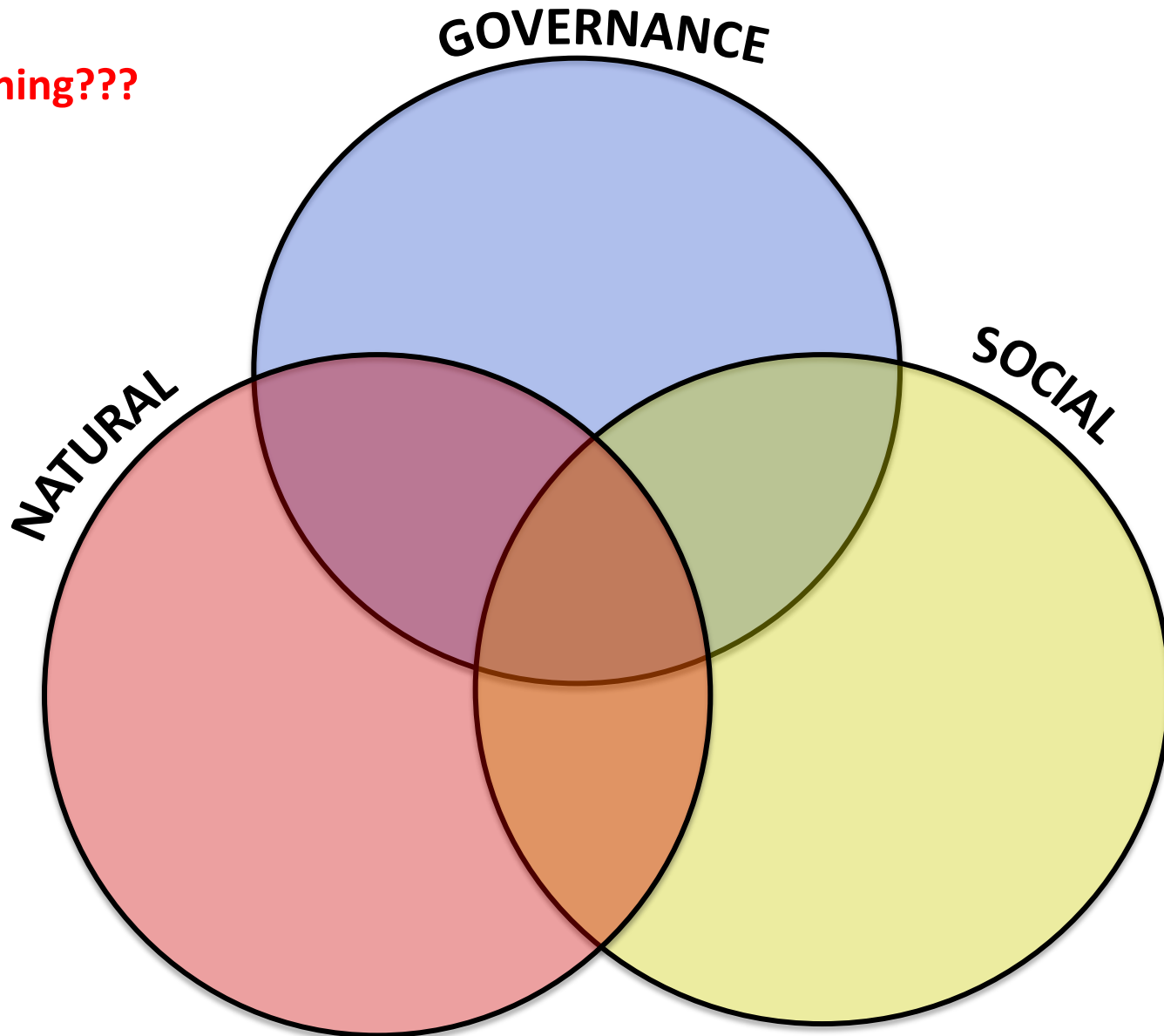
ICM

MSP

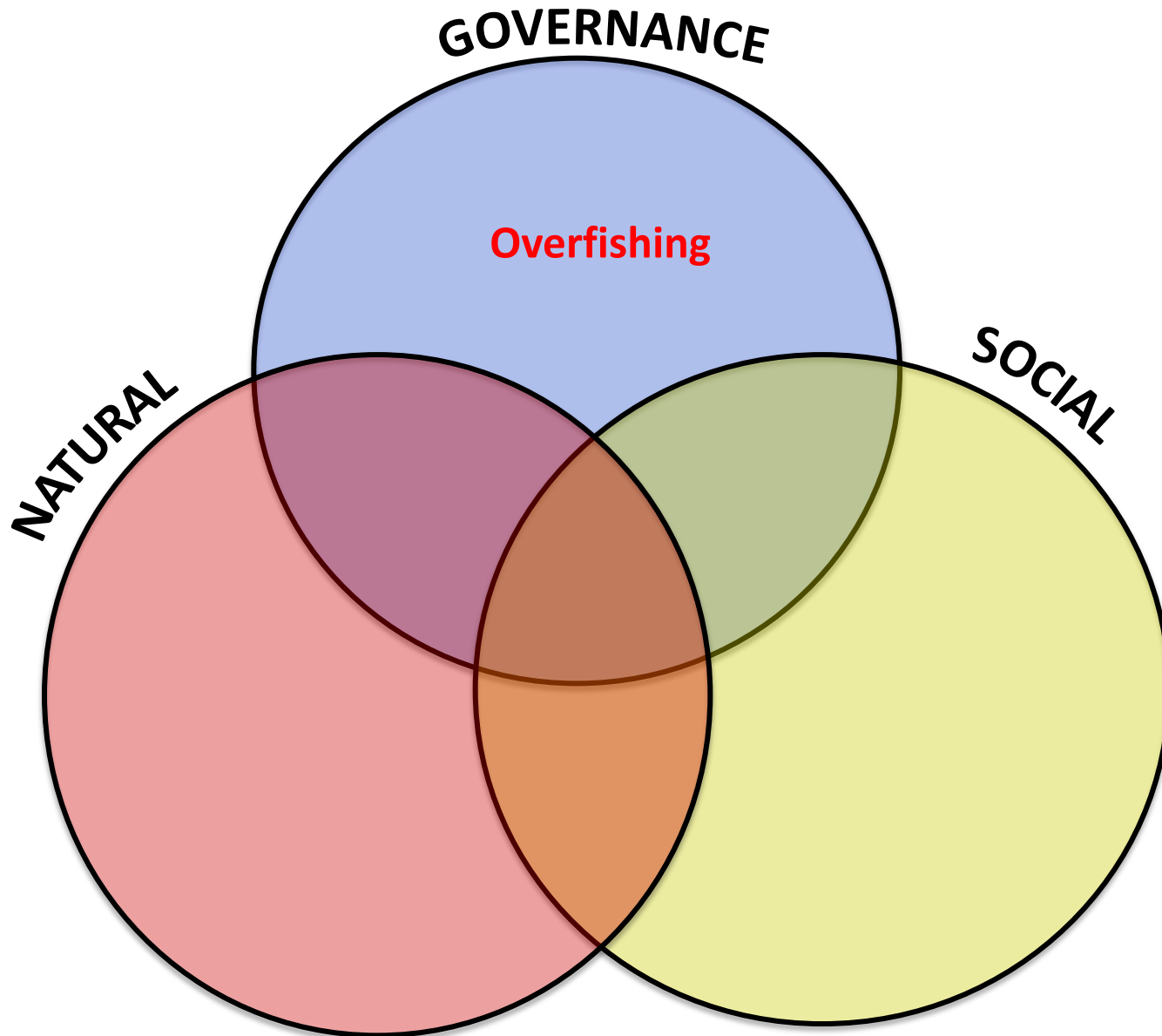
MSR

Identifying fisheries problems through transdisciplinary lens

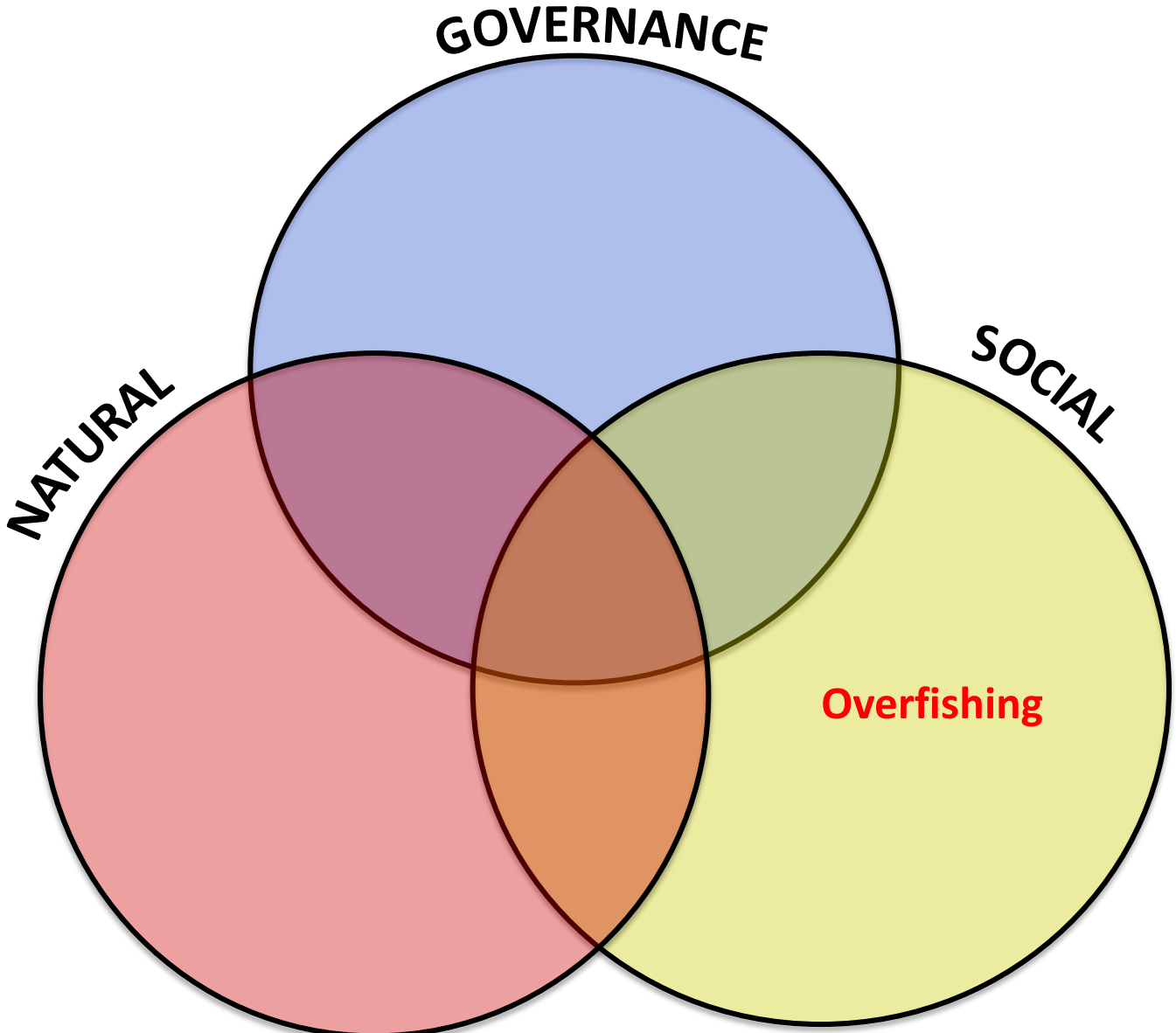
Overfishing???



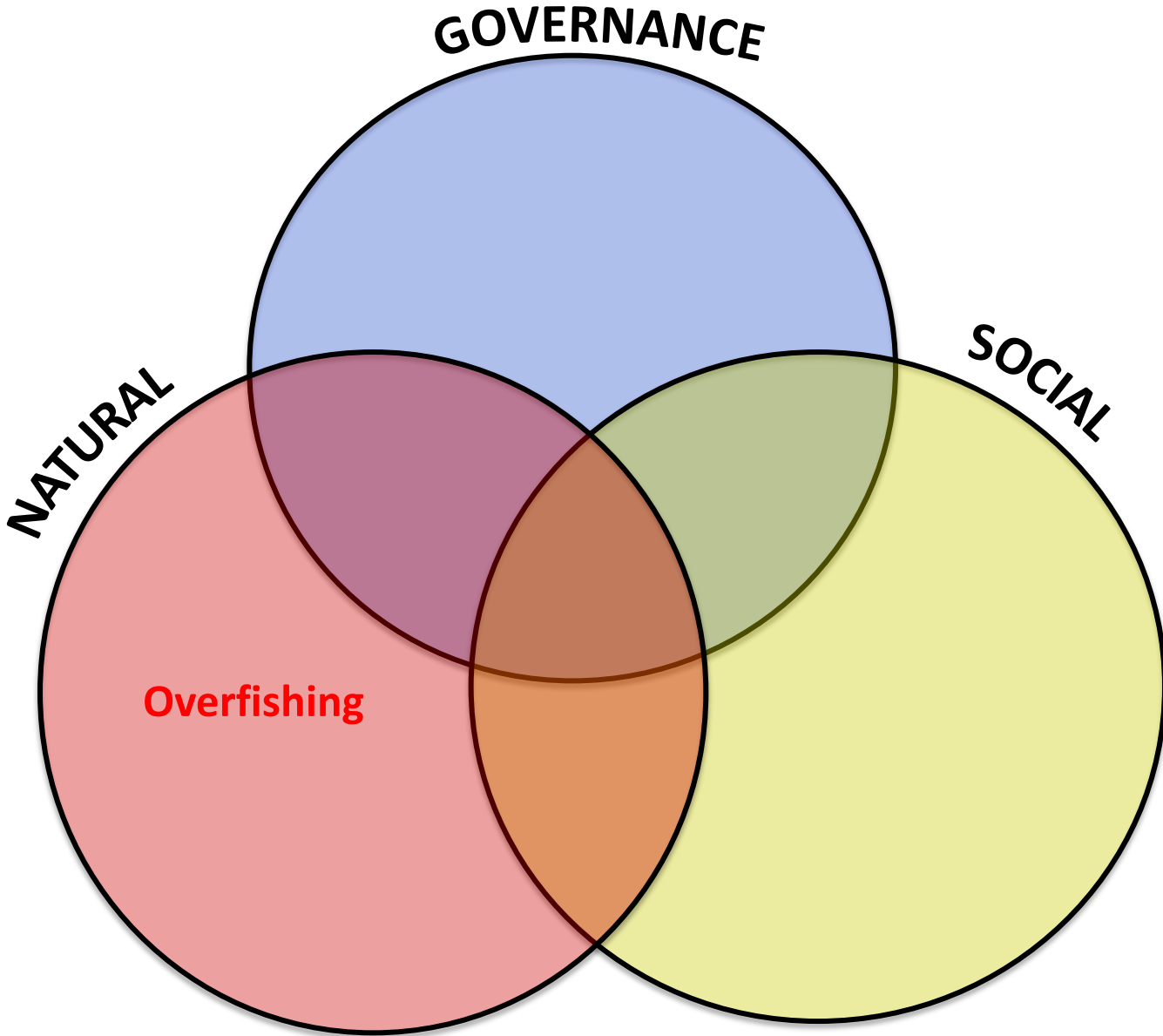
Identifying fisheries problems through transdisciplinary lens



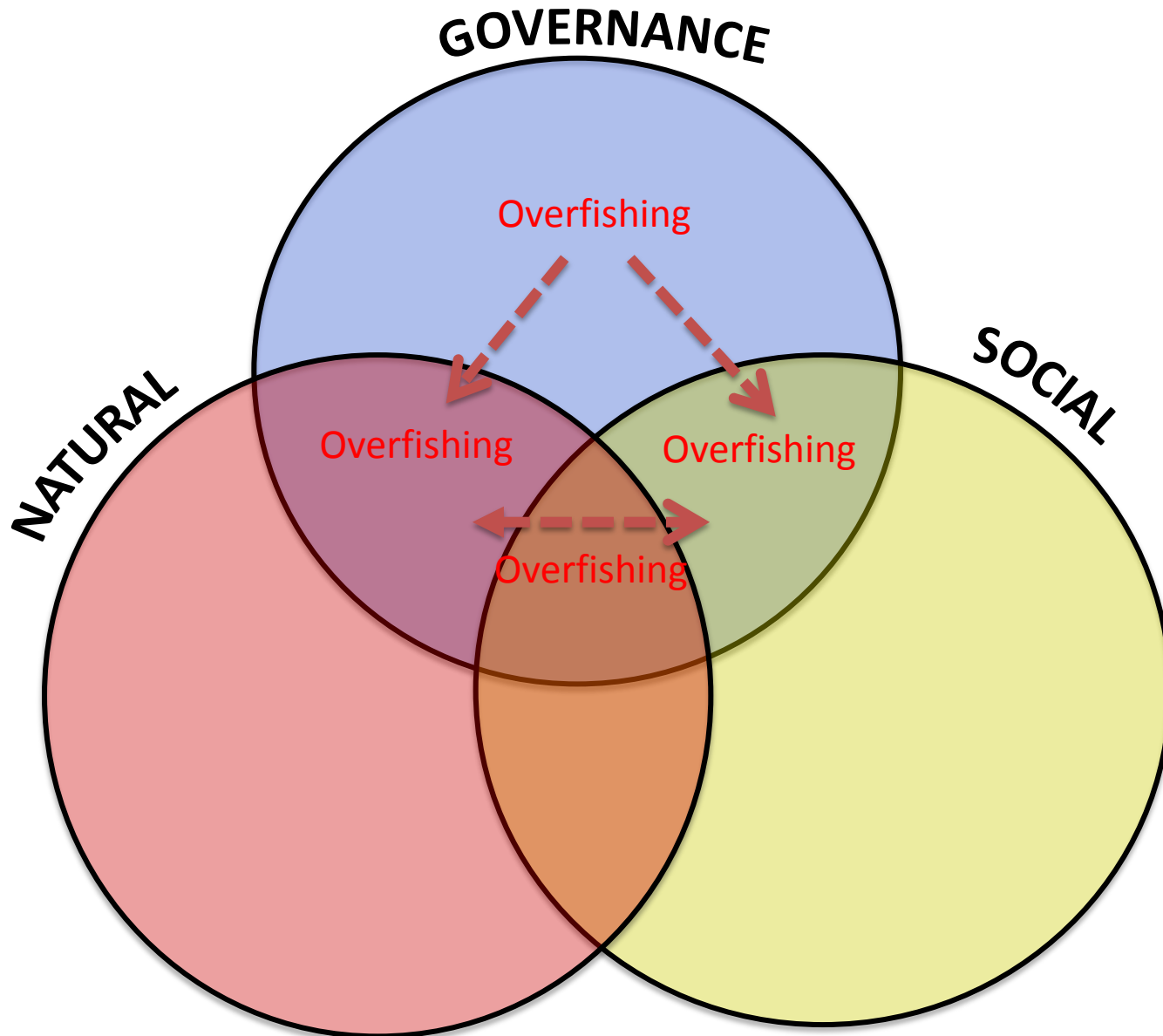
Identifying fisheries problems through transdisciplinary lens



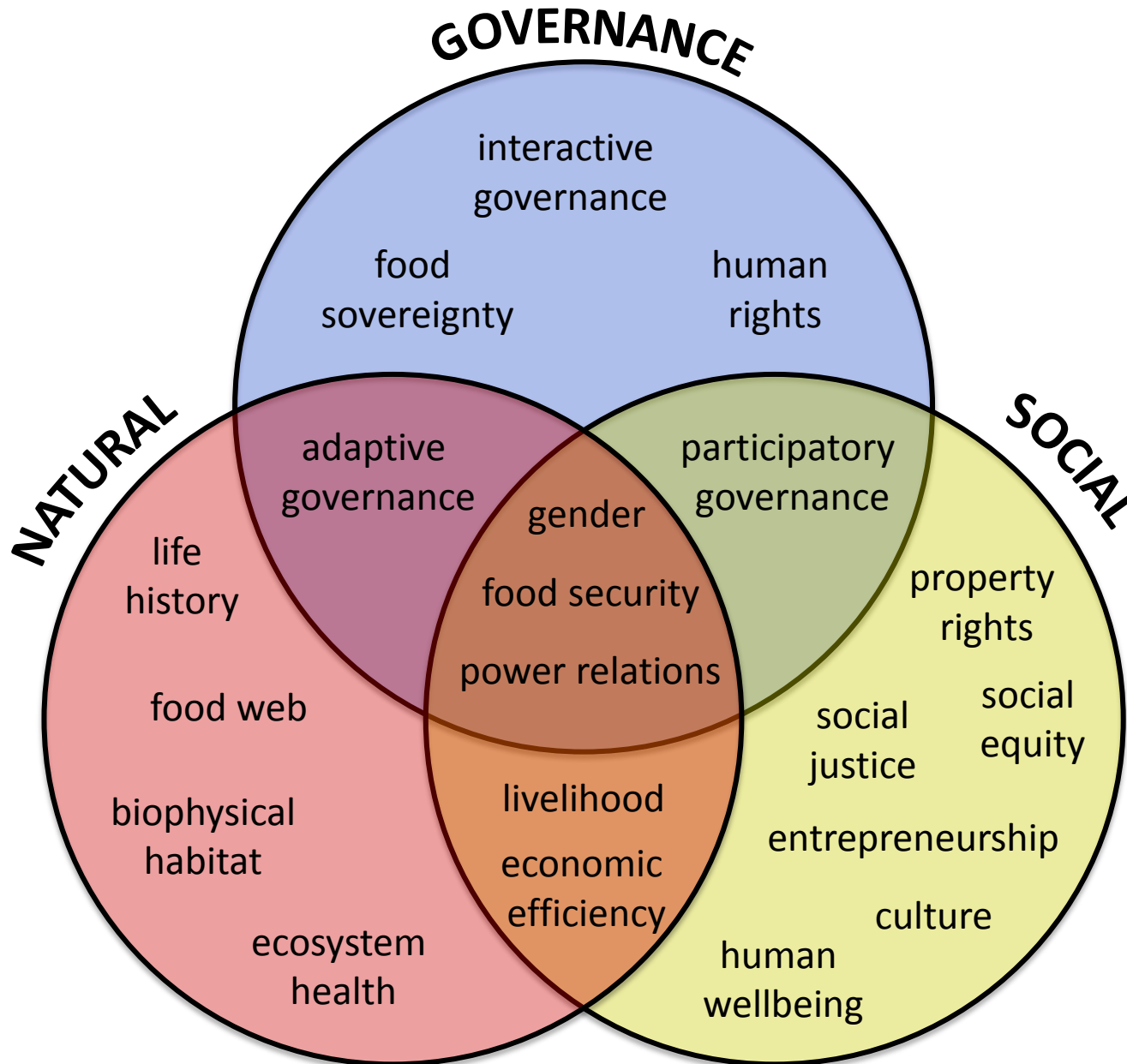
Identifying fisheries problems through transdisciplinary lens



Identifying fisheries problems through transdisciplinary lens



Topics to include in transdisciplinary research and training



Difference between transdisciplinarity and others

Approach	Framing	Process	Outcomes
Multidisciplinary	Individual disciplinary views of one problem	Includes multiple academic disciplinary views	Several disciplinary specific solutions to one problem

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Difference between transdisciplinarity and others

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Multidisciplinary	Individual disciplinary views of one problem	Includes multiple academic disciplinary views	Several disciplinary specific solutions to one problem
Interdisciplinary	Examine interactions between disciplines	Integrates multiple academic disciplinary views	Solutions draw on the integration of several academic disciplines
Transdisciplinary	Co-identify one problem from all disciplines	Bridges and transcends disciplines	Solutions integrate diverse knowledge and problem solving is recognized as an iterative and on-going process

Topics and themes of the 3rd Academy

- 1) Aquaculture in Southeast Asia
- 2) Environmental Protection, Conservation, and Restoration
- 3) Boundaries, Resources and their Management
- 4) Shipping, Ports, and Connectivity
- 5) Holistic Approach to Ocean Governance

Transdisciplinarity challenges

- Direction/process uncertain: there is no one way of doing it;
- Outcome uncertain: may not succeed; 'prepare for failure' / accept 'realism' (Visser, 2004);
- Risk being shunned for 'watering down' the disciplines; efforts not appreciated;
- Risk being alienated for breaking the disciplinary assumptions, codes and norms;
- Risk being seen as a 'fix-all'
- What if there is no real scientific need or value-added?

MARE
13

Jentoft · Chuenpagdee
Eds.

MARE Publication Series 13

Svein Jentoft
Ratana Chuenpagdee *Editors*



Interactive Governance for Small-Scale
Fisheries

Interactive Governance for Small-Scale Fisheries

Global Reflections

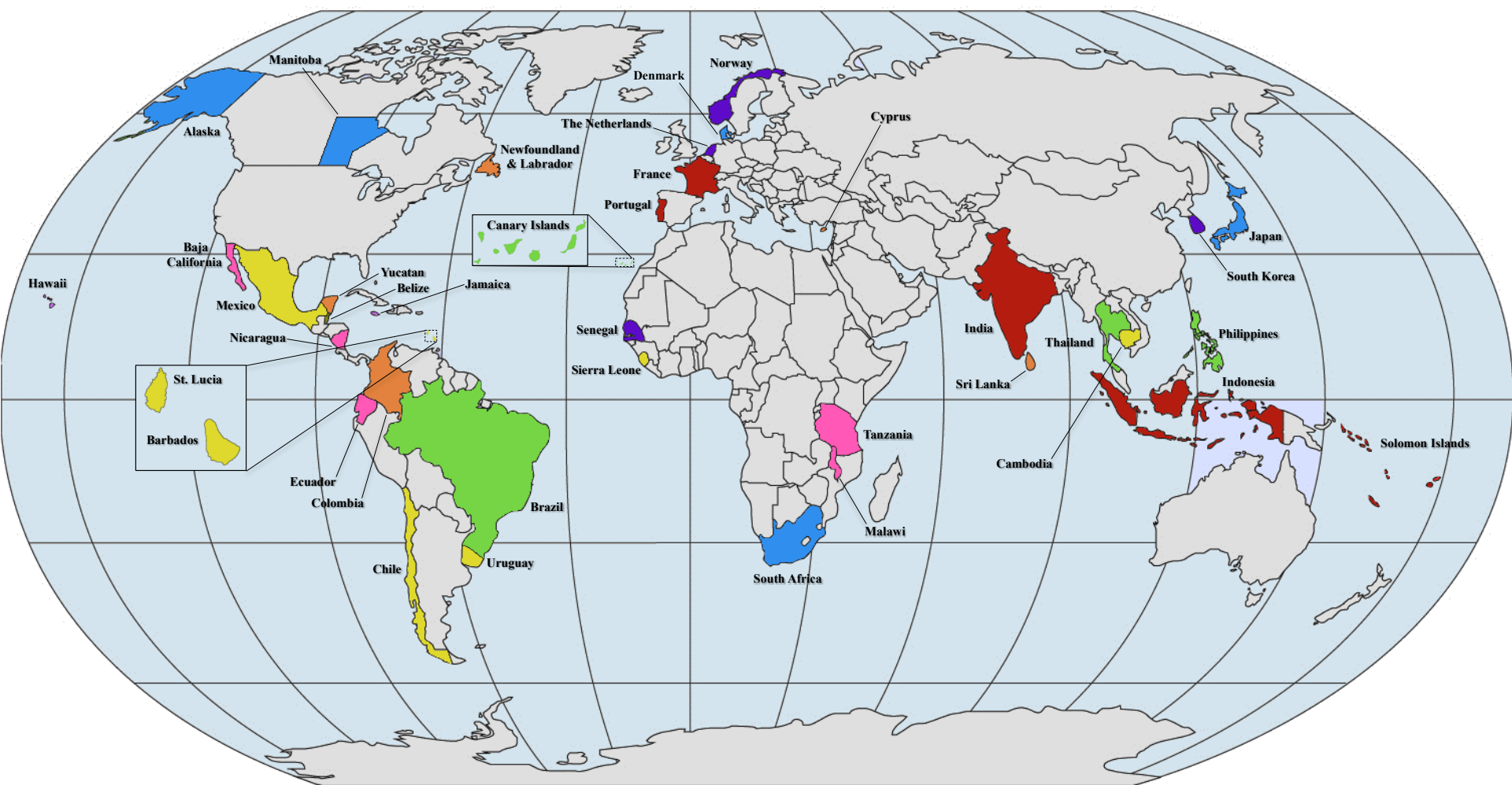
Transdisciplinary research on small- scale fisheries governance

An edited volume of 34 case studies about SSF in 34 countries around the world, by 68 authors, using a common theoretical framework, Interactive Governance.



Too BIG To
IGNORE

Global Partnership for Small-Scale Fisheries Research



Global Map of Case Study Locations by Chapter

Part I Chapter 1 Not applicable
Chapter 2 Not applicable

Part II Chapter 3 Solomon Islands
Chapter 4 Indonesia
Chapter 5 India
Chapter 6 France
Chapter 7 Portugal

Part III Chapter 8 Malawi
Chapter 9 Ecuador
Chapter 10 Tanzania
Chapter 11 Baja California & Hawaii
Chapter 12 Belize, Nicaragua, Jamaica

Part IV Chapter 13 South Africa
Chapter 14 Japan
Chapter 15 Manitoba
Chapter 16 Alaska
Chapter 17 Denmark

Part V Chapter 18 Brazil
Chapter 19 South Africa*
Chapter 20 Philippines
Chapter 21 Canary Islands
Chapter 22 Thailand

Part VI Chapter 23 Newfoundland & Labrador
Chapter 24 Cyprus
Chapter 25 Yucatan
Chapter 26 Colombia
Chapter 27 Sri Lanka

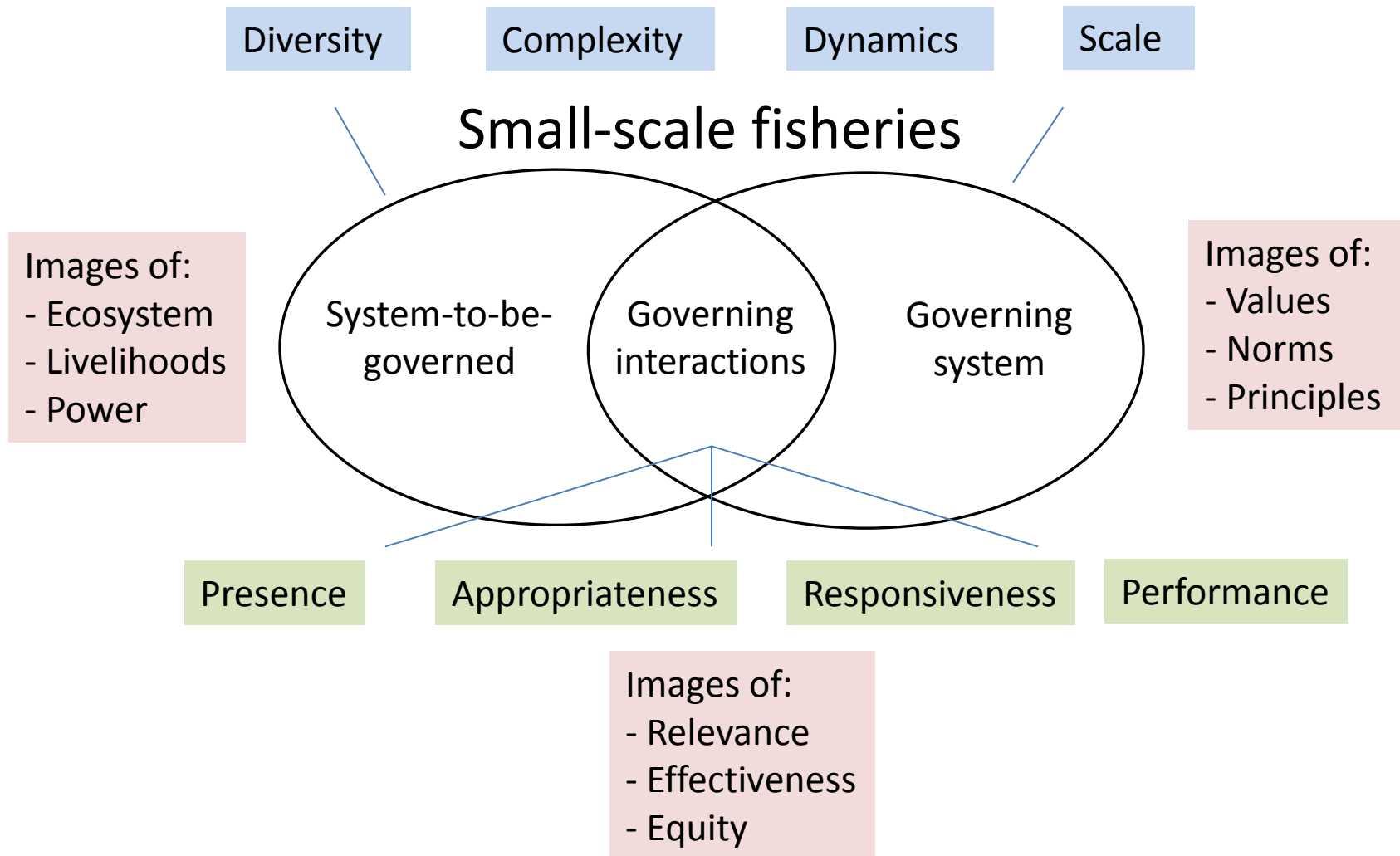
*Covered in multiple case studies

Part VII Chapter 28 Cambodia
Chapter 29 Sierra Leone
Chapter 30 Barbados & Saint Lucia
Chapter 31 Ecuador*, Chile, Uruguay, Mexico

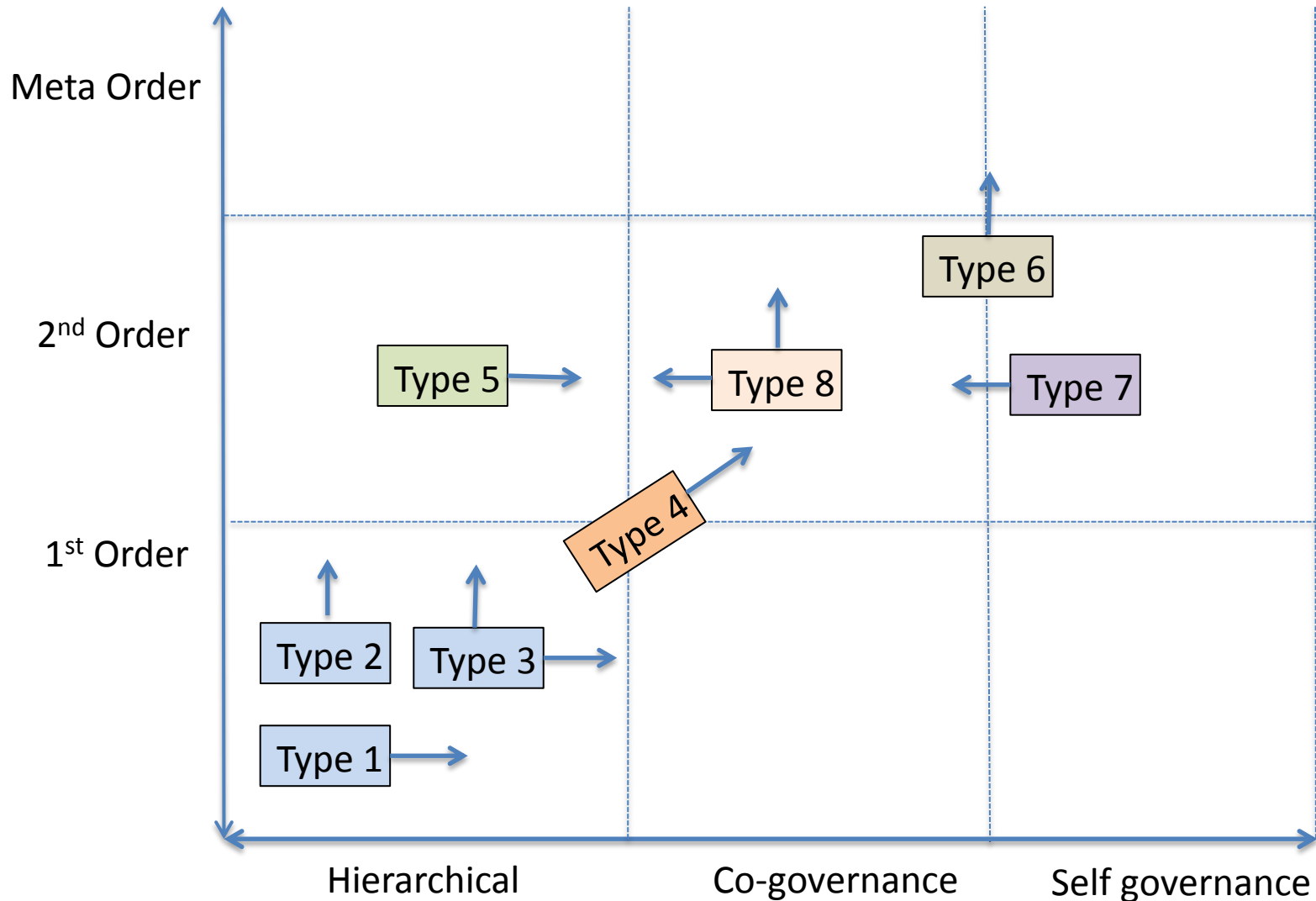
Part VIII Chapter 32 Netherlands
Chapter 33 Senegal
Chapter 34 Tanzania*
Chapter 35 South Korea
Chapter 36 Norway

Part IX Chapter 37 Not Applicable

Small-scale fisheries pose governance challenges because of the overall 'quality' of the natural, social, and governing systems, and the various images underlying their interactions.



Transformation in SSF Governance



Type 1 - Enhancing Participation; Type 2 - Rearranging Institutions; Type 3 - Step-wise Navigation
Type 4 - Diagonal Navigation Type 5 - Legitimizing Institutions Type 6 - Articulating Values
Type 7 - Realigning Governance Type 8 - Rethinking Governance

WSFC

3rd World Small-Scale Fisheries Congress
Chiang Mai, Thailand | October 22-26, 2018

Transdisciplinarity Transformation The Future of Small-Scale Fisheries



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Science symposium
Policy forum
Community roundtables
Storytelling & talk circles
Cultural exhibition
Field excursion

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