

# GOVERNING THE COASTAL COMMONS

COMMUNITIES, RESILIENCE AND TRANSFORMATION

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Community Conservation  
Research Network



## SYNOPSIS

Coastal communities depend on the marine environment for their livelihoods, but the common property nature of marine resources poses major challenges for the governance of such resources. Through detailed cases and consideration of broader global trends, *Governing the Coastal Commons* examines how coastal communities are adapting to environmental change, and the attributes of governance that foster deliberate transformations and help to build resilience of social and ecological systems.



**Read more about *Governing the Coastal Commons* here:**

<http://www.routledge.com/Governing-the-Coastal-Commons-Communities-Resilience-and-Transformation/Armitage-Charles-Berkes/p/book/9781138918436>





“Governing the Coastal Commons” was led by members and affiliates of the Community Conservation Research Network (CCRN).

CCRN is an international initiative to understand and support the links between communities, conservation and livelihoods, and to seek out best governance practices to support the combination of community-based conservation and sustainable livelihoods.

**Read more about CCRN here:**

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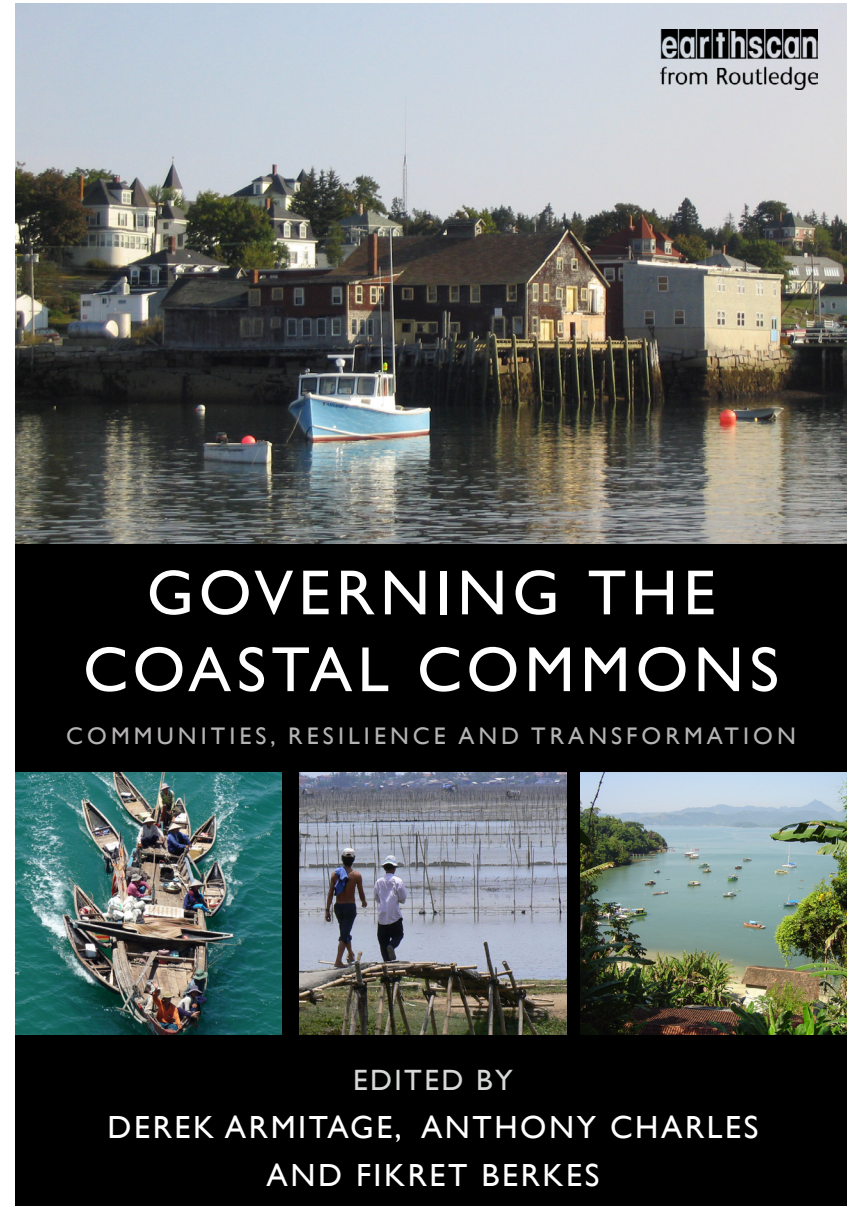
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# Preface

Most approaches to the **challenges of rapid change in coastal settings** emphasize the vulnerability of coastal communities and their limited capacity to effect positive change. The edited volume, “**Governing the Coastal Commons**”, takes a different perspective. We show how communities are engaging with a wide range of actors in proactive ways to **respond to rapid change** in the coastal commons and to create better, more sustainable conditions for themselves and their environments. These efforts are referred to as ‘**deliberate transformations**’.

Deliberate transformations can come in many different forms and at many different scales, (e.g., social, ecological, social-ecological, and governance or institutional), each with different implications. Sometimes these transformations involve social-ecological conditions more generally. But often times the focus is on **shifts in the governance processes and institutions** through which people and individual communities make decisions to seek alternative pathways of development. The outcomes of transformations are not always clearly positive, and the change processes rarely straightforward. But the lessons and insights from the cases in this volume highlight the inspiring efforts of coastal communities around the world.





**Canada**  
(Arctic)



**Canada**  
(Nova Scotia)



**Jamaica**



**Dominica**



**Mexico**



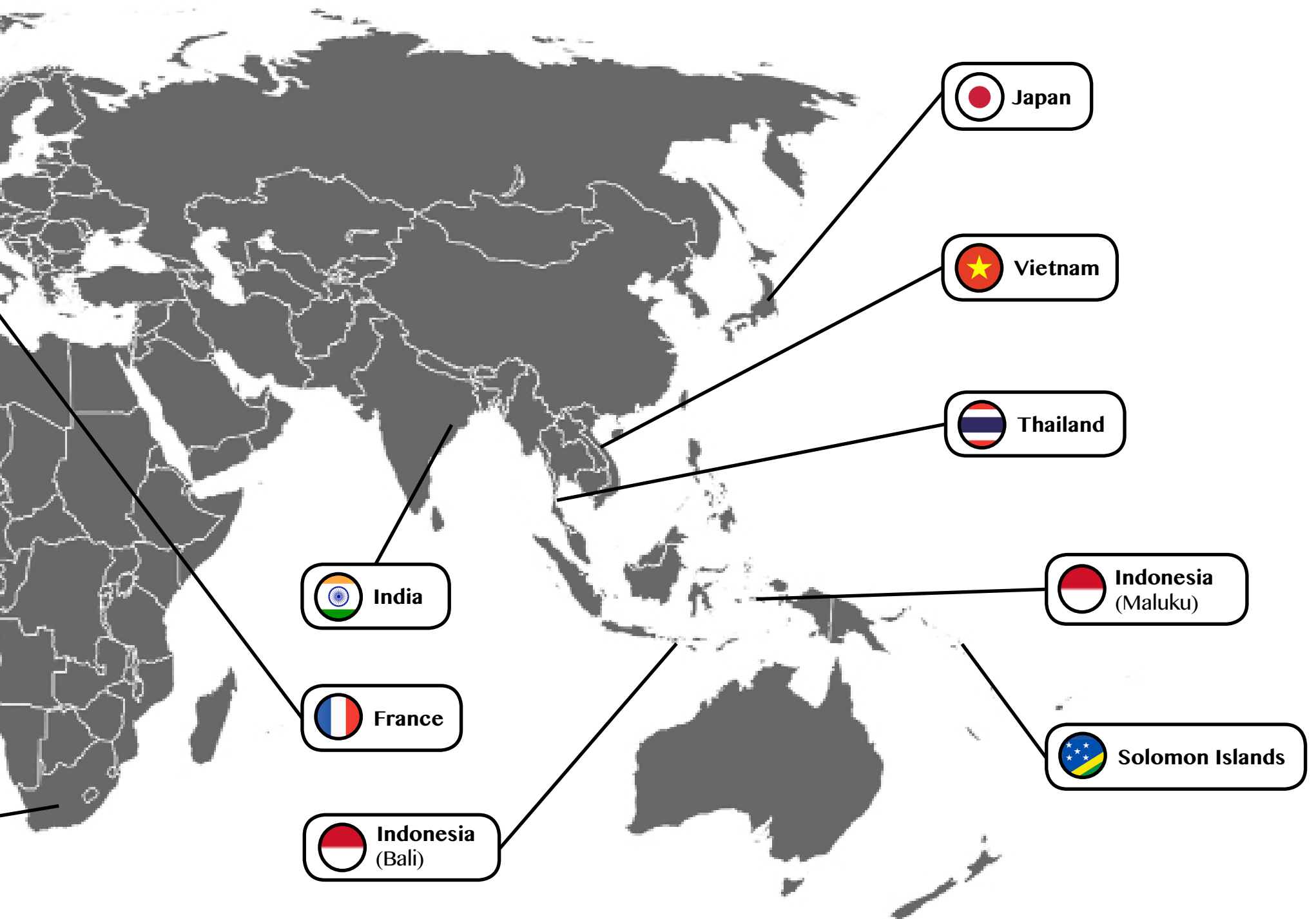
**Brazil**



**South Africa**

# Case Studies in Governing the Coastal Commons









# Ingredients and Opportunities for Transformative Change

**I**ngredients and opportunities for transformative change are as diverse as the contexts and cases reflected on the map. Our focus however is directed in particular at those ingredients and opportunities related to **‘governance’ of the coastal commons**. Governance — generally understood as the structures and processes through which societies make decisions about issues of importance — is a particularly important dimension in navigating change and facilitating transformations. What are these common governance ‘ingredients’ or opportunities to foster transformative change? We draw on a rich diversity of experiences, with examples from Asia, Oceania, southern Africa, Europe and the Americas.

## Ingredient One

Governance arrangements should involve **interactive networks** and **linkages** across multiple levels, with vertical and horizontal links among institutions. Governance arrangements must be responsive to changes in local social-ecological systems over time, sensitive to local context, and create new opportunities for decision making and collaboration that catalyze transformations.

## Case Study: Solomon Islands

The emergence of community-based resource management in the Solomon Islands is a reflection of a broader governance transformation in which customary institutions have been a foundation for change at the community level that links to international networks and organizations as well.



*Coconut frond demarcating a customary reef closure in the Solomon Islands.*



## Ingredient Two

An **adaptive and flexible** governance system is required in which **uncertainty** is recognized and addressed by policy, a diverse portfolio of management options and suitable institutional arrangements (e.g., customary arrangements, new property rights regimes, co-management) are maintained. Outcomes and feedback of interventions must be monitored, a wide range of actors collaboratively engaged, and diverse sources and types of knowledge incorporated.

### Case Study: Indonesia

In Maluku, Indonesia, the dynamic transformation of *sasi laut* — a form of community-based resource management — was facilitated by the active participation of diverse stakeholders, including local leaders, community members and external actors. There was also better engagement with the gender dimensions of customary systems.

*Fishers working on a boat in the Shireko World Heritage Site, Japan.*

## Ingredient Three

**Deliberation and informed participation** that includes the emergence of multi-level collaboration and multi-party participatory processes, helps to bring together multiple actors and perspectives, and to build social capital needed for lasting partnerships and collaborative relationships.

### Case Study: Japan

In the Shiretoko World Heritage Site process, local initiatives transformed a region into an example of community conservation success shaped by extensive collaboration among user groups. Consensus on challenging issues was achieved in part because of the presence of academic researchers that served as a bridge in the deliberative processes.



## Ingredient Four

**Social learning** provides an important foundation for adaptive governance and is recognized as both a social process and an outcome of collaborative processes influenced by social relations of power among different actors (civil society, government, industry) in the coastal commons.

### Case Study: South Africa

In the Olifants River estuary of South Africa, processes of social learning — including identification of knowledge gaps, drawing on different knowledge sources, and engaging in transdisciplinary research — were crucial in empowering coastal fishing communities, ensuring fishing rights and increasing participation in governance.

## Ingredient Five

**Knowledge pluralism and co-production** is needed in which there is recognition of the value in drawing from multiple sources of knowledge to build a holistic, integrated understanding of complex coastal systems, and in emphasizing the generation of new knowledge collectively.

### Case Study: Brazil

In Paraty, Brazil, a new ‘Terms of Agreement’ to transform a top-down approach to the management of marine protected areas was collaboratively developed. The success in doing so was linked to incorporating the knowledge, experiences and practices of local fishers.



*Traditional fishing vessel in Brazil.*

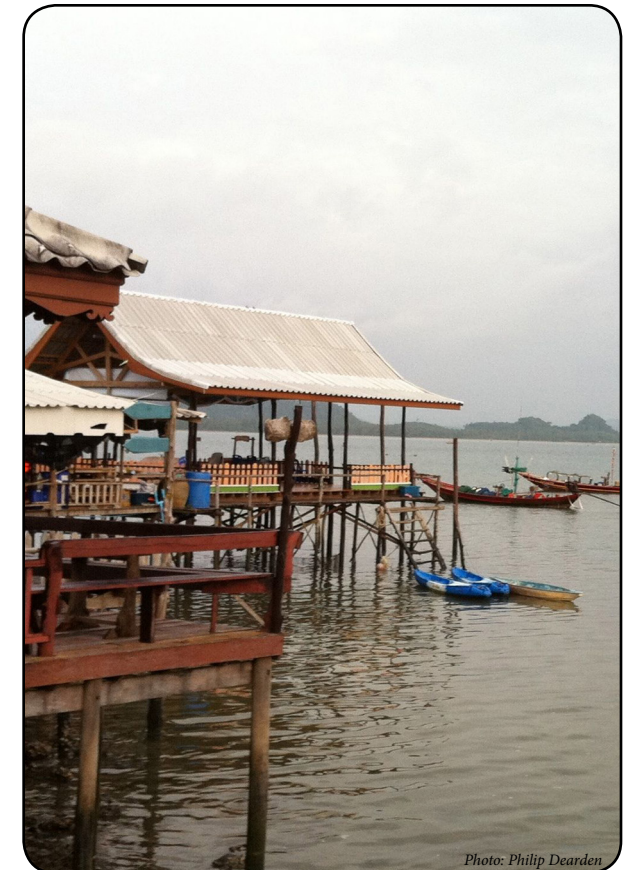
## Ingredient Six

**Leadership and capacity building** is crucial, where the importance of leadership is recognized in regards to mediation, trust building, sense making, managing conflict, and compiling and generating knowledge, as well as fostering entrepreneurial activities (e.g., income and livelihood diversification), and in recognizing that leaders come in many forms — facilitators, entrepreneurs, bridging and boundary organizations.

### Case Study: Thailand

In Koh Pitak, Thailand, a struggling community fishery triggered a transformation from a resource-based to a service-based economy. A village leader was the key person in developing community-based tourism enterprise based on homestay. Taking advantage of community social capital and the local culture of hospitality, the leader was able to obtain funding, publicity, and arranged for capacity building by local educational institutions. The transformation led to livelihood diversification, with the community fishery serving

to provide fresh seafood for tourists in homestay.



*A homestay over the sea in Koh Pitak, Thailand.*

**These six ingredients** reflect attributes of governance which are relevant in efforts to maintain a system or a particular trajectory (**adaptation**), but also in efforts to shift from one system or trajectory to another (**transformation**).





# Lessons for Navigating Future Transformation

**T**he six ingredients provide useful guidance that, under certain conditions, can foster **opportunities to transform** untenable conditions and **build resilience** of communities and resource systems of coastal commons.

The cases featured in “Governing the Coastal Commons” also reveal **five important lessons** to help navigate future transformations.

## 1. Contestation and Conflict

Paying more attention to contestations and conflicts that make coastal management a ‘wicked’ problem.

## 2. Agency, Politics and Power

Surfacing issues of agency, politics and power, which seem to underlie all aspects of social-ecological system governance.

## 3. Common Features

Identifying common features of transformative change.

## 4. Characterizing Success

Understanding and agreeing on what characterizes success in a transformation.

## 5. Practical Strategies

Emphasizing the development of practical strategies for transformation.

# Lesson One: Contestation and Conflict

**M**ost transformation processes reflect a range of **contestations and conflicts**, and they point to the notion of transformations in the coastal commons as an example of a profoundly complex or ‘wicked’ problem — problems that have no definitive formulation and no clear solution.

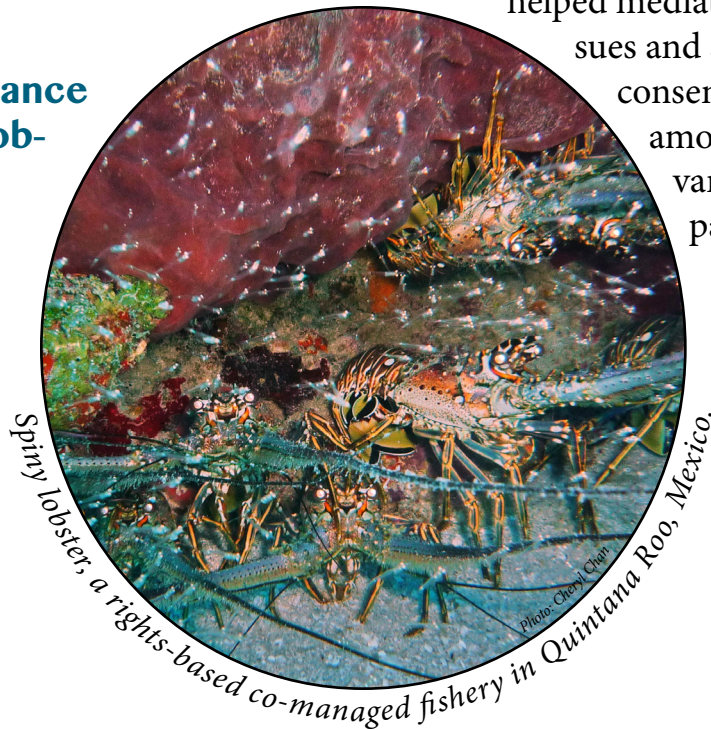
**Coastal governance is a ‘wicked’ problem.** Still, contestations and conflicts have been navigated successfully in some cases:

## Mexico

Fishers and tourism interests have found ways to assure spatial access rights to coastal commons while supporting diverse local livelihoods.

## Japan

Third-party ‘honest brokers’ (notably academic researchers) helped mediate issues and achieve consensus among various parties.



## Canada

Complexity was approached by coalition-building of citizen groups and by social learning, using many small on-the-ground experiences as stepping stones. However, the transformation in this case was slow, on the order of a decade.



# Lesson Two: Agency, Politics and Power

**H**uman agency, politics and power are key features of any effort to foster resilience and catalyze deliberate transformations. Individual and collective agency, empowerment and self-efficacy shape the way people behave, and the emphasis in this volume on agency and power relations helps to contextualize and understand more fully the nature of transformative change, and their potential to move in unpredictable directions.



## Indonesia

A transformation in coral reef-livelihood interactions took place through the individual agency of two key early adopters of cyanide-free technology to capture ornamental fish. They were both young fishers and not traditional leaders. But they were good communicators and networkers, and astute entrepreneurs who could see that everyone would be better off if they switched to environmentally friendly technology.

## Solomon Islands

The transformation to community-based resource management was characterized by the inclusion of multiple voices and actors. However, actually shifting power was a challenge as male leaders of clans with territorial rights to coastal commons still dominated.

## Brazil

A transformation from top-down to more collaborative approaches to marine protected areas engaged fishers for the first time in management arrangements that directly affected them. This shift in collaborative relations was significant, considering the long history of centralized decision-making in Brazil. However, the slowness of the process reveals the difficulties in re-working power relations, even in settings where there is an impetus to do so.



# Lesson Three: Common Features

**Every coastal community** and its relationship to the commons will vary in some manner. As a result, solutions, insights and lessons on deliberate transformations, and the factors behind them, cannot be ‘one size fits all’.

What are the **common features of transformation** cases? Identifying common features is challenging, but is needed to generate lessons applicable to more than one place and context. **Three sets of common features** seem to emerge fairly consistently from our cases:



*Oligants Estuary, South Africa.*

## 1. Emergence of legislative or policy change.

### Brazil

A new ‘Terms of Agreement’ helped redefine relationships, building on a national policy that allows greater user participation.

### South Africa

Underlying increased empowerment and participation of fishers, and the recognition of their fishery and socioeconomic rights, was a progressive and well-respected Constitution and legal framework.

### Mexico

The declaration of a natural protected area induced development of new institutional arrangements through multi-level collaboration of local, regional and federal institutions.

## 2. Presence of ‘catalyst’ or trigger of change (either social or ecological).



*Sign demarcating a customary reef closure in the Solomon Islands.*



## Solomon Islands

Transformation was spurred by the faltering sea cucumber fishery which encouraged a greater receptiveness to new governance models.

## Thailand

A struggling commercial fishery triggered a transformation from a fishing economy to a tourism economy.



## Indonesia

Declining coastal fishery resources and incomes made the ornamental fishers 'predisposed' to change. But it was the cyanide-free technology brought in by NGOs and its successful adoption by two individuals that tipped the trajectory towards reef conservation.

## 3. Development of new institutions or organizations and associated capacity building

### Indonesia

In the fishing town of Les, Bali, a new institution — the Ornamental Fishers' Association — promoted and socially enforced a cyanide ban. The associated capacity building involved teaching fishers the new technique of using barrier nets and hand nets (instead of cyanide). The fishers at Les became so good at these techniques that they started teaching them to other communities on the north coast of Bali.



### Canada

In Port Mouton Bay, Nova Scotia, a community organization — Friends of Port Mouton Bay — became the face of opposition to aquaculture development, coordinating citizen science and strategizing policy interventions. Capacity building in this case involved a range of skills, from collecting scientific data to managing media relations.

# Lesson Four: Characterizing Success

**A**ll the cases in this **Volume** show evidence or elements of success, but in different ways. **Characterizing success** then becomes a key focal point for how we critically reflect upon transformations and the narratives used to describe them. In some cases, success is relatively easy to measure

through socioeconomic data such as improved incomes or livelihoods, or through biophysical measures, such as habitat or fishery stock improvement. In other cases, success is not easy to measure, as there are no obvious indicators. Moreover, the **challenge of scaling up** may be an important dimension of how successful transformations are characterized.

## France

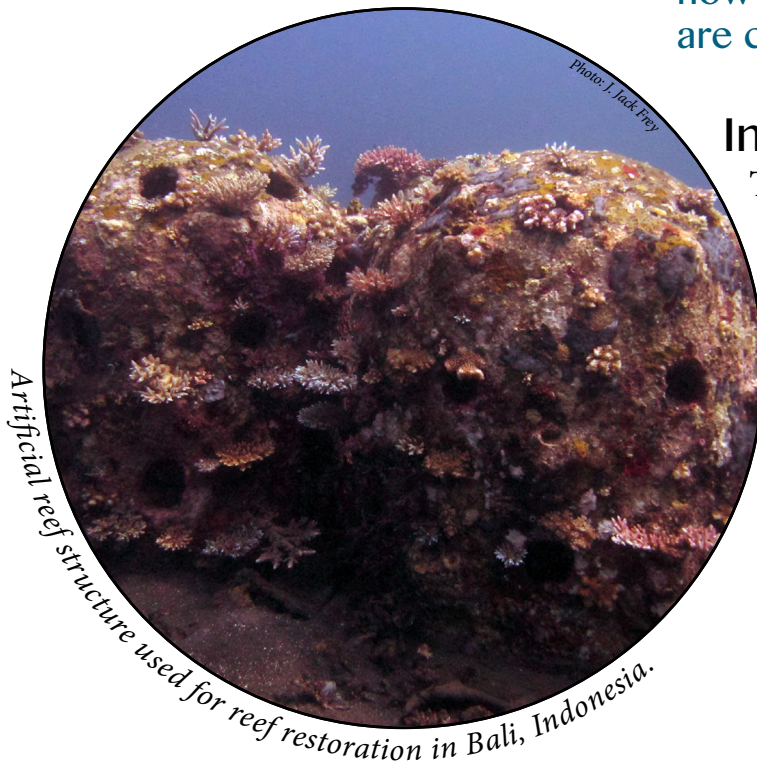
In the Camargue region and the Delta du Rhone Biosphere Reserve, 'success' involved considering both ecological vulnerabilities and economic vulnerabilities, and taking measures to enhance ecological, social and institutional resilience. Focusing on one goal was not enough for success — a holistic systems perspective was needed. Success could also be assessed in terms of the governance system that was created — in particular, its strong participatory component and multi-level networking.

## Solomon Islands

The transformation to community-based management is relatively profound. Yet, for individuals and communities, success is mixed and heterogeneous, as there are tensions with scale.

## Indonesia

The ecological restoration of coral reefs in Bali increased coral cover (a measurable biophysical indicator). However, the success of the Bali case includes empowerment, community pride, the development of self-organization and stewardship ethics.



Artificial reef structure used for reef restoration in Bali, Indonesia.



# Lesson Five: Practical Strategies

## Key Practical Strategies

**T**ransformations of the coastal commons are political, and shaped by contestations, inequitable relations of power and dynamic definitions of success. However, they are invariably practical as well.

Ongoing efforts to support **deliberate transformations** and build the **resilience of coastal communities** will require theoretically-informed and **practical strategies** reflected in the cases we outline. Some of the strategies are policy-oriented, while others are focused on taking action, as in partnership building.

- 1 Using and respecting knowledge of different types
- 2 Creating a **supportive policy context**, such as involving new legislation, rules and incentives serving to foster transformative change
- 3 Transforming mindsets
- 4 Drawing on a **local institution** to shift policies for greater sustainability and participatory governance

Using practical strategies often means trying different ones and learning-by-doing. The cases in this volume show that the actual mix of strategies will vary based on the social-ecological system and nature of the challenges being faced. But the practical strategies reflected here provide guidance for communities and their partners engaging in transformative efforts to protect the coastal commons for future generations.





# Conclusion

**Governing the Coastal Commons** is one of the first efforts to adopt a transformations focus on coastal commons and communities. Using multiple examples from different parts of the world, we show the complex ways in which changes unfold, and the challenges and complexities of understanding **deliberate governance transformations**.

The experiences reflected here show that transformations do not always work and are not necessarily desirable — at least for some sectors of the society being transformed and for some powerful interests. **Transformations in the coastal commons are inevitably contested.** Still, notions of transformation in the coastal commons serve as a useful boundary concept to ask questions about linked social-ecological changes and strategies needed to move toward sustainability.

In the context of changing coastal commons, the **feedbacks and challenges confronting social and ecological systems** are not going to be resolved through incremental improvements in conventional practices. Rather they reflect the situations which demand (and create) opportunities to rethink more fundamentally how coastal communities and commons will continue to coexist in ways that support human wellbeing and maintain the ecosystems upon which we depend.



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