

Baffling Shades of Blue

Addressing the impacts of the Blue Economy
on small-scale fisheries in Latin America



International Collective in Support of Fishworkers

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Azimuthal Equal-Area Projection

0 500 Kilometers
0 500 Miles

Boundary representation
not necessarily authoritative.

South Georgia and
South Sandwich Islands
(administered by U.K.,
claimed by ARGENTINA)

Falkland Islands
(Islas Malvinas)
(administered by U.K.,
claimed by ARGENTINA)

ICSF PUBLICATION

Baffling Shades of Blue:

Addressing the impacts of the Blue Economy on small-scale fisheries in Latin America

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International Collective in Support of Fishworkers (ICSF)

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Acronyms

ABNJ	Areas Beyond National Jurisdiction
CAF	Development Bank of Latin America
CARICOM	Caribbean Community
CBD	Convention on Biological Diversity
CCRF	Code of Conduct for Responsible Fisheries
CONFEPESCA	Confederation of Artisanal Fishers of Central America
CPP	Comissão Pastoral da Pesca
CSO	Civil Society Organizations
DOALOS	United Nations Division for Ocean Affairs and the Law of the Sea
EJA	Environmental Justice Atlas
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization of the United Nations
FENAPESCA	National Federation of Artisanal Fishers, Nicaragua
FWO	Fishworker Organization
GDP	Gross Domestic Product
GEF	Global Environment Facility
ICSF	International Collective in Support of Fishworkers
ICZM	Integrated Coastal Zone Management
IDB	Inter-American Development Bank
IOC	Intergovernmental Oceanographic Commission
IUU	Illegal, Unreported and Unregulated fishing
LME	large marine ecosystem

MAR	Mesoamerican Reef
MSP	Marine Spatial Planning
MPA	Marine Protected Area
OECAP	Organization of Aquaculture and Fisheries Entrepreneurs
OECD	Organization for Economic Co-operation and Development
OSPESCA	Central American Organization of the Fisheries and Aquaculture Sector
PACA	Pacific Central-American Coastal Large Marine Ecosystem
SDG	Sustainable Development Goals
SICA	Central American Integration System
SSF	Small-Scale Fisheries
TBTI	Too Big To Ignore
UNCLOS	United Nations Convention on the Law of the Sea
UNCSD	United Nations Conference on Sustainable Development in Rio de Janeiro
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFSA	United Nations Fish Stocks Agreement
WWF	World Wildlife Fund

Background

This study by the International Collective in Support of Fishworkers (ICSF) provides an analysis of how the so-called ‘Blue Economy’ discourses and practice plays out from the perspectives of small-scale, artisanal fishworkers in ten Latin American countries: Brazil, Chile, Peru, Ecuador, Colombia, Panamá, Costa Rica, Nicaragua, Honduras and Guatemala. The study is part of ICSF’s campaign activities aimed at generating critical knowledge to support and strengthen fishing communities engagement in small-scale fisheries and to promote social development and sustainable fisheries on the basis of a human rights-based approach, in accordance with the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines).

Here we focus on ‘blue economy’ or ‘blue growth’ paradigms and associated impacts. These ‘blue’ sectors include both existing uses of marine and coastal resources (food provisioning, marine transport and infrastructure, and energy production and extraction) and emerging industries (e.g., marine biotechnology, seabed mining, carbon sequestration); as well as a push for environmental conservation through the promotion of marine protected areas, amongst other management and development tools. Fishworker organizations (FWO) and civil society have pointed out that social equity concerns have seldom been sufficiently addressed under the blue economy/growth paradigm. SSF supporters worldwide are therefore increasingly calling for a profound rethink of ‘blue’ agendas and investments.

In this context, ICSF partnered with the Food and Agriculture Organization of the United Nations (FAO), SwedBio at the Stockholm Resilience Center (SRC) and other partners to organize a series of webinars on ‘SSF and everything blue’ from March to May, 2020. These webinars were organized with the participation of international small-scale fishworkers organizations, SSF research networks and civil society organizations (CSO). These discussions highlighted critical knowledge and policy gaps in the blue economy paradigm, which provided a rationale for a regional Latin American study with the following objectives:

1. Undertake an assessment of policy, legislation and investment relevant to the ‘blue economy’¹ paradigm, with a focus on their implications for small-scale fisheries (SSF) in ten Latin American countries
2. Evaluate competing definitions of blue economy to support the development of inclusive and sustainable ocean agendas developed in consultation with fishworkers organizations
3. Engage with national, regional and international FWOs to share the findings of the study and develop advocacy strategies to address the challenges and opportunities to SSF arising from blue economy agendas in Latin America and
4. Advocate ecosystem- and human rights-based approaches in sustainable use and management of coastal and marine resources and biodiversity in Latin America.

Reference

- 1 While there is no universally accepted definition of the blue economy, the World Bank describes it as “the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of the ocean ecosystem.” These uses include both established economic activities (fishing, aquaculture, shipping and port infrastructure, tourism, and energy production and extraction) and emerging industries (e.g., marine biotechnology, seabed mining and carbon sequestration). The ICSF study will consider relevant coastal and maritime economic activities with implications for SSF in each country.

Executive Summary

“Section I – Facing the haunted legacies of the blue economy towards small-scale fisheries” outlines the report’s general scope and the context of the emergence of blue economy discourse, policies and projects globally and specifically in the ten selected Latin American countries. Chapter 1 provides a literature-based overview of the intersection between blue economy and justice/equity in small-scale fisheries (SSF) context; and a synthesis of major concerns and opportunities that have been voiced out at the international level, which guides our regional analysis. Chapter 2 outlines the methodology used – including key informants’ interviews and review of scientific literature, blue finance reports and conflict/injustice datasets – to critically assess blue economy narratives, ocean governance frameworks, and the main challenges and opportunities for small-scale fisheries in the context of ‘blue’ agendas.

“Section II – Blue economy strategies, finance and conflicts with small-scale fisheries in Latin America” characterizes the ‘blue economy’ work of 11 international organizations (e.g., UN agencies and major banks),¹ in the region, and takes stock of the conflicts generated by major coastal-ocean economy sectors and their impacts on small-scale fisheries, including: fisheries and aquaculture; mining; energy matrix; agriculture and livestock; environmental resource management and conservation; tourism; coastal state development & territorial use/occupation; transport, infrastructure and logistics; other industries; public sector and public policies.

We identified over 7,000 nationally based projects from 2012-2020 and classified 494 ‘blue’ investments out of these, predominantly in the coastal states of all assessed countries. Brazil is the largest recipient of these investments and Nicaragua the smallest. The Fisheries and Aquaculture sector ranked sixth behind environmental resource management and conservation (n=271), territorial development and use/occupation, energy, tourism and transport infrastructure and logistics, and ahead of other industries, agriculture and livestock and mining sectors. A total of 47 Global and Regional blue investments were also identified—predominantly in the area of Environmental Resource Management and Conservation (n=25) and particularly with direct implication to SSF (n=15). These projects create

an international ‘blue’ arena that seldom includes the participation of SSF organizations. This report shows the troubling lack of information on the impacts of financial investments by major international banks and other donors—a major challenge for fishworkers organizations and supportive socio-environmental justice organizations.

A total of 192 conflict/injustices were identified, critically assessed and coded against blue economy sectors. We pointed out subnational gaps in social-environmental justice mapping in coastal states across the region. Each conflict/injustice record comprises multiple associations to health, goods under dispute and numerous places, and provides a glimpse of the informational complexity involved in the assessment and representation of social struggle at regional level.

“Section III: Summary of Critical Challenges and Opportunities” offers country-specific analyses aimed at unveiling how the blue economy’ discourse and practice plays out from the perspective of small-scale fisheries in each country. We offer an overview of the context of SSF integration (or lack of) within national coastal and ocean governance and economy-related policies; and identify pressing challenges and opportunities for the realization of equity principles within each country’s developmental and governance dynamics. The information is based on key-informant interviews in each country and analysis of documents and news found on the internet. We also examine the profile of international investments in each country and the insights gained from reports of social-environmental injustices by blue economy sectors on SSF available in on-line repositories hosted by research and social-environmental justice organizations.

Our assessment identified 51 critical challenges and 42 potential opportunities to advance equity and justice for SSF in the context of the blue economy. Across the assessed countries, the report highlights the need to address the inequitable distribution of economic benefits; the widespread social and cultural impacts of ocean development; the exclusion of SSF from decision-making and governance; and troubling environmental degradation and reduction of ecosystem services. This scenario points to an urgent need for developing policies and mechanisms to foster inclusive and participatory planning and governance of coastal and marine resources; to provide and protect SSF’s access to resources, recognizing their contributions to sustainable development; and the equitable distribution of benefits from the ocean economy in Latin America.

“Section IV – Recommendations for Action” looks back at the findings of the previous sections to reflect on future regional advocacy pathways. The section synthesizes main challenges and opportunities and offers recommendations for action towards the inclusion of small-scale fishers in marine and coastal governance and development. Key next steps include: 1) Share the findings of this preliminary assessment with national and regional Fishworker Organizations (FWO) for review and refinement of the report; 2) Development of learning networks of FWO and civil society to collaboratively map specific blue economy projects and their impacts on small-scale fisheries at the national level and; 3) Identify regional and international multilateral processes and agencies with a mandate in fisheries, ocean governance, food security and human rights, so as to provide guidance on the development of a sustainable and equitable blue economy.

Reference

- 1 United Nations and Member States; United Nations Conference on Trade and Development – UNCTAD; United Nations Development Programme – UNDP; Intergovernmental Oceanographic Commission – IOC (UNESCO); Food and Agriculture Organization – FAO; Parlamento Andino; Central American Integration System – SICA; The World Bank Group; Inter-American Development Bank – IDB; Global Environment Facility – GEF; Development Bank of Latin America – CAF.

Section I

**Facing the haunted legacies of
blue economy towards
small-scale fisheries**

Chapter 1

Conceptualizing the interaction between blue economy and small-scale fisheries

Author: Leopoldo Cavaleri Gerhardinger

Global & Regional Trends in Small-Scale Fisheries

Marine small-scale fisheries reportedly employ about 36.3 million people worldwide, 90 per cent of all fishing-related jobs. More than 200 million people work in the formal and informal seafood processing sectors (FAO, 2020). Contributions of small-scale fisheries (SSF) are not captured in current estimates of yearly global GDP from ocean economic sectors. OECD conservatively estimates that the size of this economy is USD1.5 trillion, supporting some 31 million jobs and projected, in 2016, to double by 2030 (OECD 2016).

SSF play an important role in shaping Latin American history and identity, accounting for about 85 per cent of over 20 million people in the fisheries sector (FAO, 2019; MSP Global, 2020) (Table I). With some of the world's most extensive hydrographic basins—20 per cent of global freshwater—and 30 per cent of global mangrove ecosystems (FAO, 2017), Latin America is often praised for its potential to provide quality food and a plethora of other important ecosystem services for humankind. The population of Latin America is estimated to surpass 792 million people in 2060. Food security and nutrition will become an increasingly bigger challenge in the region (FAO, 2017).

The region's SSF sector is as diverse as the range of ecosystems it operates across freshwater, brackish and marine aquatic systems. Facing rising market demands and standard requirements, SSF still struggle with lack of adequate social protection policies, poor fisheries management, reduced economic competitiveness within the dominant developmental model, intra and inter-sectoral conflicts and competition over natural resources (FAO, 2019). Developing countries of Latin America and the Caribbean region are net fish

exporters (FAO, 2018; FAO, 2020), mainly after the contributions of Chile and Peru—with over a half of all fishery exports—followed by Ecuador, Mexico and Argentina (Agardy *et al.*, 2017).

Given the general prevalence of consumer preferences oriented towards meat consumption in Latin America, a small decrease in per capita food fish intake of around 10 per cent is projected by 2030. However, there are wide variations within countries (FAO, 2020); fish consumption is very high among riverine indigenous peoples and coastal fishing communities.

Trends in urban development and population growth are expected to lead total fish consumption to increase in Latin America by 2030, mostly from production growth in the aquaculture sector, projected to increase by 33 per cent (FAO, 2020).

Table I: Profile of Fisheries and Aquaculture (F&A) in the selected countries in Latin America

Country	Population (millions)	Employment in F&A (000s)	F&A Production (000 tons)	F&A Export Value (million USD)	F&A as % of GDP
Brazil	210	3,500,000	1,299 (54% F, 46% A)	253	<1%
Chile	18	169,000	3,170 (58% F, 42% A)	5,162	4%
Colombia	51	1,500,000	187 (47% F, 53% A)	135	<1%
Costa Rica	5	14,800	34 (40% F; 60% A)	130	<1%
Ecuador	17	270,000	1,166 (62% F; 38% A)	3,000	3%

Country	Population (millions)	Employment in F&A (000s)	F&A Production (000 tons)	F&A Export Value (million USD)	F&A as % of GDP
Guatemala	16.6	23,000	43 (39% F; 61% A)	115	<1%
Honduras	10	24,000	72 (15% F; 85% A)	453	1%
Nicaragua	6.5	40,000	84 (65% F; 35% A)	289	2%
Panama	4	45,000	185 (94% F; 6% A)	177	<1%
Peru	32.5	110,000	7,273 (98% F, 2% A)	2,736	2%

[Sources: FAO, 2022, UNCTAD, 2016, National Fisheries Authorities – prepared by ICSF]

Blue Economy Impacts on Small-Scale Fisheries

Under a narrative of opportunity, resources and prosperity, the Blue Economy is increasingly attracting investors, insurers, banks and policymakers.¹ The world is still adapting to the multiple health and socioeconomic crises brought by the Covid-19 pandemic. For SSF communities, the global health crisis has worsened the crippling legacy problems of livelihood and access to coastal resources and fishing grounds. Promoters of the Blue Economy must not overlook this. After World War II, several countries in Latin America advanced national Exclusive Economic Zones, developing and implementing technologies and capacities for undertaking fish stock assessments (Pauly, 2018). The major drivers of economic change affecting SSF also determine wider societal concerns. They bear upon climate change, food consumption

patterns and their interactions, and over a century of industrialization and economic growth in developed countries (Teh and Sumaila, 2013).

Demographic challenges must be taken into account. For example, capture fishers in the Global South have historically been increasing, while SSF have decreased dramatically in the North, following the introduction of market-based quota systems (FAO, 2020; Pinkerton *et al.*, 2015, 2017). SSF today are also afflicted by the legacy of fisheries industrialization projects from the 1960s and '70s. These have impeded equitable access to resources, causing overcapacity and overfishing in many cases, in turn boosting conservation agendas in the past decades (Arbo *et al.*, 2018).

An economic focus on industrialization and high-tech paths has marginalized artisanal fisheries from planning and large-scale investments (Cisneros-Montemayor, 2019). A precedent 85 per cent of global fisheries subsidies has been directed to industrial operations, accounting for only 10 percent of jobs and about 30 per cent of seafood produce (Sumaila *et al.*, 2016; Cisneros-Montemayor, 2019). This is an example of the deep inequalities in the fisheries sector (Pauly and Zeller, 2016).

SSF organizations have made loud calls to avoid the potential rise of a business-as-usual blue economy. They point to the effects of neoliberal policies of enclosure, privatization and deregulation on fisheries conflicts (Pinkerton *et al.*, 2017). Contradictions are inherent in the objectives of the blue economy (Hadjimichael, 2018). Fishers have had to deal with intra-sectoral struggles, such as those with actors in the market chain who compete for space and resources with other direct and indirect ocean users. There are conflicts with government authorities when it comes to mobilizing social movements to join the battlefield. It goes so far as to undermine their willingness to engage in resource stewardship (Teh and Sumaila, 2013).

In the face of the above, fishing communities and their organizations now have the FAO Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines).

The SSF Guidelines are very relevant to the blue economy as they recognize the competition over coastal and marine resources and provide tools to protect the rights of fishing communities. Specifically, sections: 5.7 preferential access, 5.9 tenure rights and conflicts, 5.11 dispute resolution and redress, 5.15 participatory management and marine protected areas, and 10.2 on

marine spatial planning read together point to the need for policy coherence and participatory governance in the context of the sustainable development of fishing communities.

The SSF Guidelines should be the overall guiding instrument, steering the blue economy towards equitable outcomes. An increasing body of research and strategies aimed at management of SSF can inspire blue economy projects to tackle historical injustices. Such insights are yet to be included in practice, to broaden the frequently narrow scope on improving income, to encompass the perspectives on vulnerability and marginalization (Hellebrandt *et al.*, 2014).

We need to collectively ask some crucial questions. To what extent will the array of blue economy initiatives transform the business-as-usual? Will they pave the path towards a truly sustainable and equitable ocean economy? Or will they further restrict control over resources to historically powerful economic agents?

Blue economy: Definitions

At the 2012 UN Conference on Sustainable Development in Rio de Janeiro (UNCSD or Rio+20), multilateral discussions—leveraged by strong advocacy from coastal and island developing countries—were fundamental in kick-starting efforts to advance national and international blue economy agendas.²

Several agencies, including the United Nations Conference on Trade and Development (UNCTAD), the Organization for Economic Co-operation and Development (OECD) and the World Bank, have introduced their own concepts of the blue economy. Most proposals advocate a paradigm shift in governance and in the policymaking and implementation of development efforts. More often than not, they rely on market-based economic assumptions and goals. Equity is often expected to implicitly shadow economic growth in ocean industries (Cisneros-Montemayor, 2019).

We argue that that these initiatives are underpinned by wishful thinking about the oceans as a source of economic growth. They might worsen the power asymmetry in Latin American countries, deepening the historical marginalization and social vulnerability of fishing communities. The dangers of monetizing nature by creating ‘market values’ in ways that foster unjust neoliberal models of economic development are highlighted (Kull *et al.*, 2015; McDonough *et al.*, 2017; Jacobs *et al.*, 2020; Herbst *et al.*, 2020).

Most blue economy projects in Latin America have their core turned towards market integration of SSF. They are aligned with SDG 14b on providing access for small-scale artisanal fisheries to resources and markets. We highlight the rush for advancing spatial planning and zoning of the oceans and coasts as an explicit attempt to ‘optimize’ the capital gains of ‘Development Spaces’ (Whisnat and Reyes, 2015). Project proposals and strategies can refer to a range of principles governing the blue economy.

There is sufficient evidence from Latin America and other regions of the risk of marine spatial planning (MSP) becoming a technocratic ruse for business-as-usual economic planning, albeit painted in a new shade of blue (Gerhardinger et al., 2019, 2020; Flannery et al., 2020).

An area of particular attention is that of pluralistic ecosystem services assessments. They need to support more equitable trade-offs as an outcome of decision-making processes, aimed at resolving long-standing territorial conflicts and unsustainable practices in the coastal zone (Herbst et al., 2019).

The diversity in interpretations of the blue economy, enables its users to incorporate divergent visions and ideologies in their programmes, even conflicting agendas (Childs and Hicks, 2019). Notable tensions are identified across the spectrum of ocean development narratives, though the packaging of blue narratives may differ from country to country. Fishworkers and supporting organizations responding to social struggle are developing an alternative, Blue Justice perspective (Jentoft, 2021).

The United Nations Convention on the Law of the Sea (UNCLOS) sets the legal framework for States to sustainably manage marine resources. It is this framework that should guide a sustainable and inclusive blue economy agenda. In accordance with international law as set out in UNCLOS, fisheries (UN Fish Stocks Agreement and the Code of Conduct for Responsible Fisheries) and biodiversity (Convention on Biological Diversity) instruments provide pathways for the sustainable and equitable use of resources.

This subsection outlines the range of concerns, potential solutions and critical questions. The report will scrutinize these subsequently, with illustrative examples. It will delve into the context to build an understanding of the potential tensions fisherfolk organizations are likely to encounter.

References

- 1 <https://www.unepfi.org/blue-finance>
- 2 <https://sustainabledevelopment.un.org/content/documents/2978BEconcept.pdf>

Chapter 2

Materials and methods

This chapter offers a detailed account of the methods employed to retrieve information used in this assessment from multiple sources. The lead authors of each of the ten country-level case studies used the following approaches to collect information:

- 10 key-informant interviews, mostly with fisherfolk leaders, but also with civil society organizations and academics from 13 organizations.¹ (*See the study questionnaire in Annex I*)
- Online searches for academic, technical and policy documents and news (Scopus and Google Advanced Search).
- Assessment of existing online databases on conflicts and injustices in the region using the Environmental Justice Atlas (by University of Barcelona); Information System on Small-Scale Fisheries (by the Too Big To Ignore research partnership); Map of conflicts involving environmental injustice and health in Brazil (by Fiocruz); and Map of conflicts involving Artisanal Fisheries in Brazil (by Conselho Pastoral dos Pescadores).
- Assessment for all the ten countries of international development finance retrieved from selected banks and funds (UN Development Program; the World Bank Group; Inter-American Development Bank; Global Environment Facility; Development Bank of Latin America).

All reported conflicts/injustices and finance projects were classified into major coastal/ocean economy sectors, hereby regarded as blue economy sectors, using descriptors attributed to each sector while coding each finance/conflict record (*See Annex II*).

The material above was shared with lead country co-authors. They engaged with additional contributors to obtain a deeper analysis describing and assessing each country's international investment policy, blue economy narrative and ocean governance framework (focusing marine protected areas, coastal and marine spatial planning); challenges (including an overview of conflicts/injustice records); and the opportunity context for SSF in ocean-based development.

Section III (Chapters 6 - 15) of this report presents an abstract depicting each country's blue profile. It contains a shortlist of critical challenges and opportunities identified across each country-based assessment. These multi-country contributions are then analyzed in combination (Section IV) using the categories outlined in 'Ten key considerations to advance blue justice in blue growth initiatives' in Bennett et al. (2021).

Section V proposes a handful of the most pressing recommendations for action based on the early findings and regional advocacy imperatives elicited by those involved during the assessment process for this report.

Reference

- 1 World Forum of Fish Harvesters & Fish Workers (International); World Forum of Fisher People (International); Future of Fish (Peru); Artisanal Fishermen and Fisherwomen Movement (Brazil); Bocatoreños Artisanal Fishermen Union (Panama); National Federation of Artisanal Fishers of the Republic of Panama; Central American Confederation of Artisanal Fishing; National Confederation of Artisanal Fishermen of Chile; Nicaraguan Fisheries Federation; Association of Artisanal Fishermen of the Gulf of Fonseca; Federation of Fishing Cooperatives of Ecuador; Magdalena University (Colombia); CoopeSolidar R.L. (Costa Rica); Costa Rica Federation of Small-Scale Artisan Fishers; C-Codem (Network of Communities and Organizations Defending the Mangrove Ecosystem); and Brazilian Future Ocean Panel – Ocean Horizons program (Socioenvironmental Justice Research-Action Team).

Chapter 3

Overview of international blue economy strategies in Latin America

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Latin American blue economy in academic repositories

A total of 838 documents were retrieved from all academic-based platforms with the term blue economy (including duplicate documents across all three platforms). Advanced academic search enabled the identification of 11 documents (excluding duplicates) across ten Latin American countries: Brazil (n=7 occurrences); Peru (n=3); Chile (n=2) and; Colombia (n=1).

These relatively low numbers reveal the absence of studies engaging with the term blue economy in most of the studied countries. It indicates how seldom it has been the focus of research in the region. Overall, global academic

Documents by year

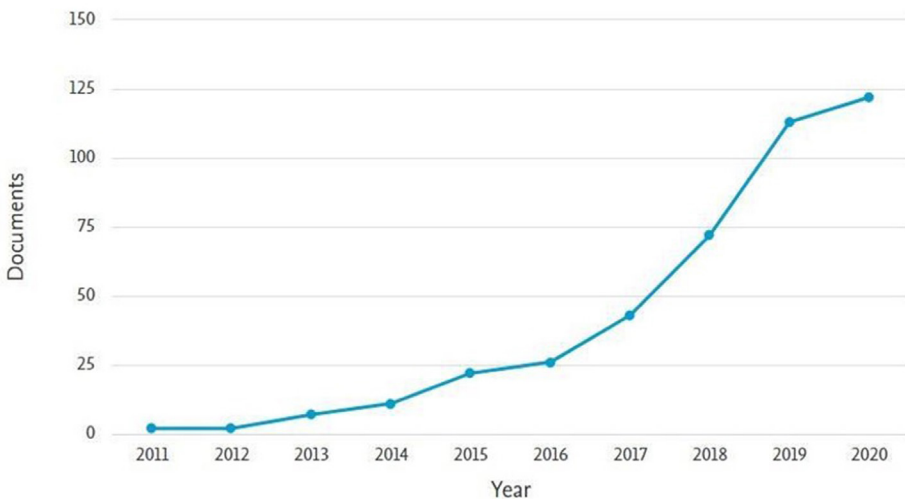


Figure 1: Academic production with 'blue economy' (in Title, Abstract or Keywords) in Scopus on-line repository.

production on the blue economy has slowly increased since 2012. In the ten studied countries, eight out of eleven publications were after 2019, again highlighting the recent emergence of the topic worldwide—and particularly in the region (Figure 1).

Latin American blue economy projects by selected international organizations in the region

While the term ‘blue economy’ has not yet been frequently used to frame academic research in Latin America, it has mobilized coastal and ocean policy arenas, both at the national and regional levels. An overview of the array of international organizations with regionally oriented work and investment in the blue economy paradigm is the starting point to explore how this rationale is being promoted in Latin America.

The present report highlights the main organizational scope of action, and relevant initiatives of 11 selected intergovernmental organizations and banks/funds with a relevant mandate in Latin America. These would include any references to coastal and marine sectors and fisheries in the nationally determined contributions in UNFCCC, but cannot get into those here.

We found relevant blue agendas advanced by all 11 organizations (for example, two regional blue economy policies), including 57 national and 15 global or regional investment projects with direct implications to SSF. Our assessment indicates a very limited capacity by Latin American fisherfolk organizations to follow-up with and influence national, regional and global ‘blue’ investments and policies reported herein.

United Nations and Member States

Since the Rio+20 meet in 2012, the UN has been advancing the concept of blue economy / blue growth and its applications by its several agencies, including:

- The Sustainable Development Goals (SDGs) framework, including a specific SDG on Life Below Water (No14). Under this, SDG 14.b stressed the need to “...provide access of small-scale artisanal fishers to marine resources and markets.”
- Over 1,633 voluntary commitments were placed on SDG 14 by several stakeholders. They have since joined the UN Communities of Ocean

Action (The Ocean Conference, June 2017 New York). But a search through all voluntary commitments for the term ‘small-scale fisheries’ produces only 18 recorded initiatives.

- The UN has also proclaimed a Decade of Ocean Science for Sustainable Development 2021-2030 (<https://www.oceandecade.org>). Again, a critical assessment of SSF concerns is needed. We need to ask: Did the various levels of planning and implementation account for these concerns?
- The Convention on Biological Diversity (CBD) sets targets for conservation and sustainable use of biodiversity, including marine biodiversity. It calls for equitable benefit sharing of genetic resources, marine genetic resources, area-based approaches such as marine protected areas and other effective area-based conservation measures. Its Conference of Parties will negotiate a new “Post-2020 Global Biodiversity Framework” in 2022, including biodiversity targets.
- Developments in the Sendai Framework for disaster risk reduction¹ and the Decade on Ecosystem Restoration² have an important bearing on SSF.
- An online platform of the Our Oceans Conference series, led by national governments, monitors the implementation of commitments. It includes 354 organizations from governments, private sector and CSOs. A total of 1,404 commitments are currently recorded.
- The ten countries in our study account for 65 commitments relevant to blue economy agendas; merely three explicitly cite small-scale fisheries. Only Brazil, Honduras and Guatemala have not placed their own. Other countries have made commitments, starting with Chile (n=24) and followed by Panama (n=20), Peru (n=9), Costa Rica (n=8), Nicaragua (n=2), Colombia (n=1) and Ecuador (n=1). Only three commitments explicitly mentioned artisanal fisheries.
- While the assessment of the number of commitments reveals interesting patterns of how various actors are pushing the blue economy globally, this approach masks how much finance has been proposed and actually delivered and, more importantly, the real impact of such investments in environmental sustainability and social equity.

United Nations Conference on Trade and Development – UNCTAD

- A key player, UNCTAD advocates the role of the blue economy concept. It has led various activities in collaboration with other UN organizations and partners such as FAO, UNEP, UNECE and International Ocean Institute.
- Substantial efforts have gone into developing a framework for Blue BioTrade (including relevant criteria)³ in four ocean sectors⁴. This has implications for Latin American fisheries addressed in UNCTAD’s report. Here, the solution spotlight is placed on value-chain analysis in combination with the ecosystem-based and adaptive management approaches, elaboration of standards and certification/labeling programs (2744).

Box 1: Important UNCTAD blue projects to follow up with direct implications in the context of small-scale fisheries in assessed Latin American countries

⁶UNCTAD has recently launched (2018) in collaboration with the United Nations Division for Ocean Affairs and the Law of the Sea (DOALOS), FAO and the Commonwealth Secretariat a project entitled “Evidence-based and policy coherent Oceans economy and Trade Strategies” that is under implementation in Barbados, Belize and Costa Rica.

United Nations Development Programme – UNDP

- UNDP has classified the ocean under ‘Development Spaces’⁵ where spatial planning should integrate conservation, sustainable use, oil and mineral wealth extraction, bio-prospecting, sustainable energy production and marine transport.
- They are strong advocates for ocean values and services to be incorporated into economic modeling, policy- and decision-making processes, from infrastructure development and trade to resource extraction and energy production.

- The conference has generated a list of over a hundred voluntary commitments, none specifically oriented towards or proposed by SSF organizations.
- UNDP has also partnered with the GEF Small Grants Programme to support local ocean management initiatives in various countries (2747).
- The study also identified 91 blue projects (total of USD 201 million) out of 4,526 UNDP projects in the region between 2012-2020, with relevant variations across the ten countries in the following sectors: Agriculture and Livestock, Conservation and Environmental Resource Management, Development and use/occupation of territory, Energy Matrix, Fisheries & Aquaculture, Industries and Tourism.
- The analysis of all 91 project titles indicates a focus on climate change, management and development, watershed management and governance, plans involving Hydro chlorofluorocarbon (HCFC), development of carbon mitigation and marine sustainability (link).
- In the Latin American region, UNDP has been a key partner in projects in Costa Rica, Peru, Chile and Ecuador, including 11 initiatives (Box 2).

Box 2: Important UNDP blue projects with direct implications in the context of small-scale fisheries in assessed Latin American countries

1. 'Biodiversity in Coastal and Marine Protected Areas' project in Guatemala.
2. 'Humboldt Current Large Marine Ecosystem Project' implemented by UNDP and sponsored by GEF in Chile and Peru, aimed at implementing ecosystem-based management approaches to fisheries management.
3. 'Coastal Marine' project in Brazil.
4. 'Resilient Gulf Fonseca Startup Plan' in Honduras.
5. 'Strengthening the Sub-system of Coastal and Marine Areas' project in Honduras.

6. ‘Global Marine Commodities Project’ aims at developing sustainability certification mechanisms (eco-labelling) in Costa Rica, Peru, Indonesia and Philippines.
7. ‘Global Sustainable Supply Chains for Marine Commodities’ Project in Costa Rica.
8. ‘Sustainable Use of Marine Coastal Biodiversity’ project in Brazil.
9. ‘Fauna and Fishery’ project in Brazil.
10. ‘Coastal Fisheries Initiative’ led by FAO in partnership with UNDP, GEF, Conservation International, the UNEP, the World Bank and WWF. It aims to strengthen livelihoods through improved fisheries management of select fisheries in Ecuador and Peru.
11. ‘Towards joint integrated, ecosystem-based management of the Pacific Central American Coastal Large Marine Ecosystem’ (PACA) project in Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico and Panama.

Intergovernmental Oceanographic Commission – IOC (UNESCO)

- IOC supports UN Member States building scientific and institutional capacities to deliver on SDG 14 with activities in several ocean-related areas⁷, including the blue economy.
- They report two major initiatives linked to the blue economy. One relates to integrated coastal area management (Southeast Pacific – SPINCAM PROJECT)⁸ and the other to marine spatial planning (MSP Global)⁹.
- MSP Global’s framework is called ‘Joint Roadmap to accelerate Maritime/Marine Spatial Planning processes worldwide’ aiming to rightfully place MSP as a driver of SDG 14 implementation. It aims to do this by, one, strengthening institutional capacities in relation to MSP and the Sustainable Blue Economy; and two, strengthening institutional coordination for the adoption of a roadmap.

- MSP Global is led by IOC-UNESCO in collaboration with the European Commission's Directorate-General for Maritime Affairs and Fisheries (DG MARE) and has five priority areas and respective strategic objectives for mutual cooperation: 1. Transboundary MSP; 2. Sustainable Blue Economy; 3. Ecosystem-based MSP; 4. Capacity building; 5. Building mutual understanding and communicating with MSP.
- Three IOC-UNESCO blue initiatives are important to follow-up in Latin America (Box 3).

Box 3: Important IOC-UNESCO blue projects to follow up with direct implications in the context of small-scale fisheries in assessed Latin American countries

1. IOC-UNESCO has launched a transboundary MSP pilot project in the Southeast Pacific¹ with specific training programmes in Chile, Colombia, Ecuador, Panama and Peru.
2. IOC-UNESCO is also advancing the cross-border MSP pre-planning phase in the Gulf of Guayaquil between Ecuador/Peru. This aims to develop recommendations for cross-border MSP and Sustainable Blue Economy in the Gulf of Guayaquil, and a roadmap for transboundary MSP and Sustainable Blue Economy in the Southeast Pacific.
3. In 2020, MSP Global with the support of Sweden, national and regional authorities and other partners, the IOC-UNESCO promoted a series of online training events in Guatemala, Costa Rica, Brazil, Colombia, Ecuador, Panama and Peru.

Food and Agriculture Organization – FAO

- The initial focus of the Blue Growth programme in the Latin American region has been on the Caribbean: St. Lucia, Grenada and Barbados.¹⁰ But other FAO activities have been linked to the programme more recently.
- FAO has ongoing activities in Latin America (Box 4).

Box 4: Important FAO blue projects to follow up with direct implications for SSF in assessed Latin American countries

1. Early developments of the Coastal Fisheries Initiative in Ecuador¹³
 2. Project REBYC-II LAC3 in Latin America and the Caribbean (Sustainable Management of Bycatch in Latin America and Caribbean Trawl Fisheries) is funded by GEF and implemented in six countries (Brazil, Colombia, Costa Rica, Mexico, Suriname and Trinidad and Tobago) (410; 2764).
 3. FAO's Blue Growth initiative has also mobilized a EUR 40 million grant for the project 'FISH4ACP Sustainable Development of Fisheries and Aquaculture Value Chains in African, Caribbean and Pacific (ACP) countries'.¹⁴
 4. FAO is a collaborator of a GEF-funded regional project entitled 'BE-CLME+': Promoting National Blue Economy Priorities Through Marine Spatial Planning in the Caribbean Large Marine Ecosystem Plus'. It encompasses activities in six countries: Barbados, Belize, Guyana, Jamaica, Panama and St. Lucia.
- The 'Report of the High-Level International Meeting on the Global Blue Growth Initiative for Latin America and the Caribbean' (Mexico City, 2017) presents the main challenges and opportunities for fisheries and aquaculture. It proposes an action plan with a series of activities, including: identifying institutional capacity building needs (stock assessments methods and government officials capacities), strengthening network of exchange tackling IUU fishing and regulatory frameworks¹¹, inclusion of fish in school programmes, inventory of fish supply and demand across Latin American countries, reactivation of aquaculture network of the Americas¹², linking SSF and aquaculture with procurement food systems, resilience of family economy in SSF and resource-limited fish farmers.
 - The meeting resulted in representatives of relevant organizations in the region signing a political statement entitled 'Declaration of Political Commitment to Promote Blue Growth in Latin America and the Caribbean'.

Central American Integration System – SICA

- SICA is formed by eight core countries—Guatemala, El Salvador, Honduras, Nicaragua, Belize, Costa Rica, Panama and the Dominican Republic—and various observer countries.
- A blue economy strategy has been advanced by SICA's fisheries and aquaculture organization (Organization of the Fisheries and Aquaculture Sector of the Central American Isthmus or OSPESCA).
- OSPESCA's Fisheries and Aquaculture Integration Policy 2015-2025¹⁵ has no specific focus on the blue economy.
- In June 2019, the Blue Economy Summit was held in Roatán, Honduras. Here the Letter of Roatán was launched with a call for blue economy advances in the Caribbean region, with the support of UNEP and the government of Honduras.¹⁶
- In July 2020, a webinar series¹⁷ was organized by SICA and the European Union to kickstart the elaboration of what was called the Regional Strategy for Blue Growth in SICA Countries, under OSPESCA's coordination.
- Shortly after the webinar series, a document outlining a strategy for building SICA's blue economy strategy was launched. It contains the scope of the strategy, next steps and partners. The document informs that the blue economy strategy will be coordinated by OSPESCA within the framework of the 'Technical Assistance Project for the strategic programming of Central America' (ATEPECA), executed by the General Secretariat of SICA and financed by the EU.
- It also declares that the group of participants in the policy-building process will be composed by members of OSPESCA Regional Fisheries Policy Working Group (GTPP), the Confederation of Artisanal Fishers of Central America (CONFEPESCA) and the Organization of Aquaculture and Fisheries Entrepreneurs (OECAP).
- In October 2020, the OSPESCA director contributed to a webinar convened by UNESCO-IOC's MSP Global project (MSP Global, 2020) where it was informed that SICA's blue economy strategy would include fishing, tourism, cruises, sport marinas, shipbuilding, mining exploitation, maritime transport, aquaculture and biotechnology. The presentation also informs the services

of a consulting firm with offices in Spain and El Salvador (Institute for Sustainable Business Growth – ICSEM)¹⁸ in the design process.

- The regional strategy will be considered a reference for the design and implementation of roadmaps at the national level, aligned with sectoral policies and with the maximum participation and involvement of stakeholders.
- None of the informants of this study were aware about this ongoing policy-building process on the blue economy neither in their countries nor in the region.

The World Bank Group

- The World Bank Group has a total of 187 projects implemented or under implementation in the ten studied countries (total of USD 33 billion) between 2012 and 2020. The report characterizes the distribution of finance across studied countries, with significant differences.
- The World Bank has also generated knowledge through various technical reports on oceans and, more recently, on blue economy concepts and applications (The World Bank, 2017).
- Perhaps the most relevant in the context of this study is the report ‘Toward a Blue Economy: A Promise for Sustainable Growth in the Caribbean’ which has the ambition to serve as a guide to help Caribbean countries plan a transition to a blue economy and to socially equitable blue growth.
- The report only superficially mentions SSF. It does not consider the specifics of the sector, nor the historical inequity and imbalance.
- The World Bank recently initiated ‘PROBLUE’ as the new umbrella multi-donor trust fund to support the “...sustainable and integrated development of marine and coastal resources in healthy oceans” (World Bank website). It has a portfolio in excess of \$1 billion in the fisheries sustainability sector (contributions from Norway, Sweden, Iceland, France, Germany, Canada, Denmark, the European Commission, France, Germany, Iceland, Norway, Sweden and the US), and is considering inviting private donors, profit and non-profit donors.

- PROBLUE has a Blue Economy Action Plan that seeks to contribute to the implementation of SDG 14 focusing on the following areas:
 - i Addressing threats of marine pollution to ocean health, including litter and plastics, from marine or land-based sources.
 - ii The sustainable development of key oceanic sectors such as tourism, maritime transport and offshore renewable energy.
 - iii Building government capacity to manage marine resources, including nature-based infrastructure such as mangroves, in an integrated way to deliver more and long-lasting benefits to countries and communities.
- A large multi-sector program in the Caribbean named ‘Unleashing the Blue Economy in the Eastern Caribbean’ project is an investment under development in four countries—Dominica, Grenada, St. Vincent & the Grenadines, and St. Lucia—and provides a glimpse of the bank’s strategy in the region.
- PROBLUE is also supporting a regional initiative to develop strategies on solid waste management, particularly plastic, and marine environmental protection in Dominica, Grenada, St Vincent & the Grenadines, and St. Lucia. A similar initiative is under early development in El Salvador and Honduras.
- A recent Blogpost¹⁹ informs the bank’s motivation to help countries build and improve their economies through embracing a Blue Recovery. Priority ideas suggested for such recovery include: apply ‘blue lenses’ in large economic stimulus packages being approved worldwide; solid waste management systems in the sectors benefited with the recovery funds; support more sustainable forms of tourism that go beyond jobs, generating wealth for local communities; make fisheries sustainable; and use the moment to take stock of how to best use a country’s exclusive economic zone through advancement of national marine spatial planning.
- The World Bank has supported 22 blue projects in Latin America (USD 2.2 billion) in the following sectors: conservation and environmental resource management; development and use/occupation of territory; fisheries and aquaculture; two projects (Box 4) are particularly important to examine.
- The qualitative profile of these World Bank investments in the blue economy is summarized in a network graph based on the titles of all 22

projects, indicating a focus on water management, sanitation and security, fiscal management and sustainable development of fisheries (link).

- Our assessment identified World Bank projects of particular relevance to SSF (Box 5).

Box 5: Important World Bank blue projects to follow up with direct implications in the context of small-scale fisheries in assessed Latin American countries

1. National Program for Innovation in Fisheries and Aquaculture in Peru.
2. Costa Rica Sustainable Fisheries Development Project.

Inter-American Development Bank – IDB

- The IDB has a total of 2,194 projects implemented or under implementation between 2012 and 2020 in the ten studied countries (total of USD 69.4 billion); significant regional variations are described.
- The bank has for over 30 years produced various reports, strategies and guidelines for coastal development and integrated coastal zone management (Lemay, 1998; Simpson et al., 2012; IDB, 2020). Hence it has arguably been quite influential and well positioned to provide leadership in Latin American coastal development policy making.
- Nevertheless, there has long been severe criticism over the negative impacts of IDB operations on the environment and local communities over the years, questioning the prospects it offers for genuine economic and democratic reform.²⁰
- The bank has also turned to blue economy paradigm, mainly to label investments in the Caribbean—e.g., in the Bahamas and Jamaica—focusing on marine tourism industries, coastal zone management, renewable energy, and sustainable housing and infrastructure.²¹
- A major IDB initiative is the Sustainable Islands Platform (SIaS). Its core programmes include the blue economy, the circular economy and climate resilience.

- The bank informs that it has a current pipeline of 100 SBCE project concepts—Sustainable, Blue and Circular Economy—for countries in the Caribbean and Central and South American (Barbados, Bahamas, Belize, Costa Rica, Dominican Republic, Haiti, Honduras, Jamaica, Nicaragua, Panama, Trinidad and Tobago).
- These projects center around these themes: marine renewable energy options (e.g. ocean thermal energy conversion, floating solar panels, renewable energy plus storage, and desalination using wave energy)²²; blue carbon restoration, blue bonds for the protection and management of ocean resources, reformulation of waste (e.g. ocean plastics to lumber, sargassum to biofuel, and bioplastics from seaweed); sustainable tourism (e.g. ‘voluntourism’, geo-tourism, production of ethical-environmental tourism); and sustainable fisheries (blue finance for micro, small and medium enterprises in fisheries sector and coastal mapping/monitoring via autonomous systems).
- The SIsS platform has two programmatic financing streams and a number of supporting entities.
- They inform ongoing discussions with several country departments on policy framework and roadmaps for developing the blue economy, developing external partnerships with the Caribbean Development Bank, UNDP and FAO.
- The implementation of a SBCE Index by IDB can be considered an attempt to establish new rules of the game in both national and international Latin American blue economy financing environments.
- At the country-level, the bank says it will imbue SBCE investments with novel performance measures and metrics that citizens on the ground will understand and relate to.
- The level of engagement, participation and co-design of local citizens—artisanal fishers, more importantly—in these new monitoring mechanisms is a fundamental question to follow up, given it has not been divulged yet by the bank.
- At all levels, we expect new sociopolitical organizational forms and dynamics to emerge (e.g., knowledge-networks and coalitions, competitiveness, lobbying).
- We identified 299 blue projects by IDB (total USD 9.9 billions) across studied countries in the following sectors: agriculture and livestock;

conservation and environmental resource management; development and use/occupation of territory; energy matrix; fisheries & aquaculture; industries; mining; tourism; and transport, infrastructure and logistics.

- The qualitative profile of two IDB investments in the blue economy is summarized based on the titles of all the 299 investment projects. It indicates a focus on water sanitation programmes, climate change, sustainable energy and development of urban and rural areas (link).
- Our assessment identified 26 projects of particular relevance to SSF (Box 6).

Box 6: Important IDB blue projects with direct implications in the context of SSF in assessed Latin American countries

1. Adding Value to Mangroves Conservation in Coastal-City Systems
2. PROADAPT2 - Enhanced Resilience for Managing Climate Change Effects on the Gulf of Montijo, Panama
3. Sustainable Development of Sao Paulo State's Coastal Zone
4. Valuing, Protecting and Enhancing Coastal Natural Capital
5. Enhancing Endogenous Development with Territorial Identity
6. Mini MIF for Developing Competitiveness in the Gulf of Fonseca, Honduras
7. Panama City and Bay Sanitation Program II
8. Preparation Support of Water and Sanitation Program in Puerto Cabezas
9. Regional Economic Development in the Gulf of Fonseca
10. Strengthening the Governance and Management of the Guanabara Bay
11. Strengthening the National Innovation System of Ecuador through the Innovation Zone for Litoral Ecuador
12. Support to the participatory solid waste management in the Guanabara Bay

13. Value Chains and Rural Businesses in the Gulf of Fonseca Region
14. Biofuel Production for Electricity Generation in the Galápagos Islands
15. Experiences exchange on the introduction of renewable energy systems in islands.
16. Renewable Energy Resource Evaluation in Bay Islands
17. Adaptation to Climate Change of the Fishery Sector and Marine-Coastal Ecosystem
18. Competitiveness of Mangroves Concessionaire Communities in the Gulf of Guayaquil
19. Increase climate resilience in the Bay of Chiriqui
20. Promotion of Innovative Strategies for Sustainable Rural Development and Environmental Conservation
21. Resilience of the Blue Economy and Coastal Ecosystem in Northern Honduras MiPESCA”
22. Sustainable Sea Cucumber Hatchery
23. ECOSEA: Innovation in Aquaculture
24. Indigenous Development and Promotion Program
25. Indigenous community tourism innovation node in Arica and Parinacota Region
26. Umitron: Turning Aquaculture into a Science

Global Environment Facility – GEF

- GEF has a total of 422 projects implemented or under implementation between 2012 and 2020 in the ten studied countries (total USD 1.5 billion). Significant variation in the distribution of GEF finance was described in the region.
- The most frequent implementing agency of GEF supported projects in the assessed Latin American countries was UNDP (n=208 projects), the World Bank (n=73), UN Environment (n=47), IDB and FAO (both n=29). Other implementing agencies appearing in less than 10 projects

were the International Fund for Agrarian Development, Development Bank of Latin America, World Wildlife Fund (US Chapter), Conservation International, GEF Secretariat and the Brazilian Biodiversity Fund.

- The vast majority of funds for supported Latin American projects comes from GEF's Trust Fund (n=407), while other funds have contributed to a much lower number of initiatives: Special Climate Change Fund (n=7), Capacity-Building Initiative for Transparency (n=5) and Nagoya Protocol Implementation Fund (n=3).
- In 2018 GEF held its 54th Council Meeting²³ to discuss the organization's strategic focus, including several areas related to the blue economy.
- Under the Transboundary Waters Assessment Program (TWAP), GEF has heavily funded projects addressing issues in international water systems including rivers, areas beyond national jurisdiction (ABNJ), lakes aquifers and large marine ecosystems (LMEs).
- They have invested in the assessment of threats and opportunities using a specific framework entitled Transboundary Diagnostic Analysis (TDA) to support the development of regional action plans (called Strategic Action Programs or SAPs).
- The International Waters Focal Area Strategy has three objectives where targeted investments are being made since 2018: one, strengthening national blue economy opportunities to reduce threats to marine and coastal waters; two, improving management in the Areas Beyond National Jurisdiction (ABNJ); and, three, enhancing water security in freshwater ecosystems.
- The first objective of the International Waters Focal Area Strategy (Strengthening Blue Economy Opportunities) has a strong focus on reforming the enabling integrated legal frameworks and tools for advancing the blue economy, particularly marine spatial planning.
- The funding for sustainable fisheries management will invest in policy reform in fisheries, market mechanisms, standards for sustainable aquaculture, new and strengthened policy frameworks.
- The second objective of the focal area is to improve the management of ABNJ. This includes funding for the following: strengthen regional policy to end IUU and overfishing and inform sustainably management of marine capture fisheries; formulate policy to reduce harmful fishing

subsidies; introduce area-based management in national waters and ABNJs; implementation of international agreements; and reduce overexploitation with a focus on IUU.

- GEF allocated a total of \$1.14 billion in project grants (Nunes *et al.*, 2017) to transboundary, marine projects addressing fisheries to toxic substances, with the bulk of funds addressing land-based sources of pollution and creating large marine ecosystems (LMEs).
- GEF has also financed fisheries initiatives in Latin America and the Caribbean, having established standard stock assessment systems, operationalized satellite-based monitoring, control and surveillance devices, inland processing and post-harvest handling, fisheries co-management and regulatory frameworks (Nunes *et al.*, 2017).
- One example is the FAO-led Sustainable Management of Bycatch in Latin America and Caribbean Trawl Fisheries (REBYC II-LAC; see FAO Blue Growth Initiative).
- We identified 76 blue economy projects by GEF in the region between 2012 and 2020 (total USD 395 million), in the following sectors: agriculture and livestock; conservation and environmental resource management; development and use/occupation of territory; energy matrix; industries; tourism; transport, infrastructure and logistics.
- The qualitative profile of GEF's blue investments is summarized based on the titles of all 76 investment projects. It indicates a focus on energy efficiency, sustainable development and climate change, especially systems of transparency, biodiversity conservation (including coastal areas), and advancing transparent and integrated systems (link).
- Our assessment identified 9 GEF projects of particular relevance to SSF (Box 7).

Box 7: Important GEF blue projects with direct implications in the context of SSF in assessed Latin American countries

1. Brazil Sustaining Healthy Coastal and Marine Ecosystems Project
2. Conservation and Sustainable Use of Biodiversity in Coastal and Marine Protected Areas (MPAs)

3. Conservation and Sustainable Use of Biodiversity in Coastal Marine Production Landscapes
4. Implementation of the Strategic Plan of Ecuador Mainland Marine and Coastal Protected Areas Network
5. Integrated Management of Marine and Coastal Areas of High Value for Biodiversity in Continental Ecuador
6. Marine and Coastal Protected Areas
7. Strengthening management and governance for the conservation and sustainable use of globally significant biodiversity in coastal marine ecosystems in Chile
8. Strengthening the Sub-System of Coastal and Marine Protected Areas
9. Mainstreaming biodiversity conservation in the tourism sector of the protected areas and strategic ecosystems of San Andres, Old Providence and Santa Catalina islands

Development Bank of Latin America – CAF

- A total of 108 CAF projects between 2012 and 2020 are either implemented or ongoing in six out of our ten studied countries (USD 13 billions), featuring significant cross-country variations.
- Since its inception, CAF has reportedly invested in fisheries conservation. It has an Environmental and Climate Change Division responsible to guide support for marine and coastal conservation, following its 2015-2020 Strategic Biodiversity Program (BIOCAF).
- This programme focuses on the identification, conservation and restoration of important marine ecosystems, and supporting value chains and ecosystem services.
- CAF has strong collaborations with Caribbean Community (CARICOM) with whom it has been working since 1996 and investing in strategic fisheries projects, supporting coastal and marine ecosystem assessments, and knowledge brokering at regional and international level.

- We identified CAF's six blue projects (USD 621 millions) in three countries (Brazil, Colombia and Panama) in the following sectors: conservation and environmental resource management; development and use/occupation of territory; and tourism.
- The qualitative profile of CAF's blue investments is summarized based on the titles of all the six projects, indicating a focus on sanitation, especially in urban areas, and in bays ([link](#)).
- Our assessment identified CAF's one project of particular relevance to SSF (Box 8).

Box 8: Important CAF project of particular relevance to SSF in assessed Latin American countries

1. The organization is co-financing projects to strengthen seafood value chains, with partners such as UNCTAD (Blue BioTrade) and GEF (BE-CLME+: Promoting National Blue Economy Priorities Through Marine Spatial Planning in the Caribbean Large Marine Ecosystem Plus).

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- 1 <https://www.undrr.org/implementing-sendai-framework/what-sendai-framework>
- 2 <https://www.decadeonrestoration.org/>.
- 3 UNCTAD proposes seven criteria to guide biotrade, including: a) conservation of biodiversity; b) sustainable use of biodiversity; c) equitable benefit sharing; d) socioeconomic sustainability; e) legal compliance; f) respect for stakeholders' rights; and g) clearly defined tenure and access to resources.
- 4 See report "Blue BioTrade: Harnessing Marine Trade to Support Ecological Sustainability and Economic Equity" (2018)
- 5 <https://sustainabledevelopment.un.org/content/documents/2978BEconcept.pdf>
- 6 Acidification (Ocean); Biodiversity; Blue Carbon; Blue Economy; Capacity Development; Climate; Data and Information (Ocean); Deep Sea; Deoxygenation (Ocean); Early Career Professionals (Oceanscience); Early Warning; Eutrophication / Nutrients; Gender; Harmful Algal Blooms; Integrated Coastal Area Management (ICAM); Large Marine Ecosystems; Law of the Sea; Marine Pollution; Marine Spatial Planning; Meteorology; Observations (Ocean); Ocean Decade; Ocean Literacy; Plastics (Marine); Science (Ocean); Science Policy; Sustainable Development Goals (SDG); Time Series, Modeling, and Predictions; Tsunami and Ocean Hazards; World Oceans Day; World Tsunami Awareness Day and; Youth. See: <https://ioc.unesco.org/our-work>

- 7 <http://www.spincam3.net/>
- 8 <http://www.mspsglobal2030.org/>
- 9 <http://www.mspsglobal2030.org/msp-global/pilot-project-southeast-pacific/>
- 10 The 'Blue Growth Initiative portfolio provides the following scoping statement of activities for the Caribbean: "With rising populations, tourism and a focus on healthy diets, Caribbean Blue Growth activities are focused primarily on increasing volumes of fish for local consumption by small- and medium-scale aquaculture and aquaponics, in an economically viable, ecologically sustainable and socially acceptable manner".
- 11 Referred to as "Regional Network for exchange of information and experiences on illegal fishing among the countries of Latin America and the Caribbean".
Reactivation of the Aquaculture Network of the Americas with the following priorities: transboundary aquaculture diseases; capacity building for micro and small-scale aquaculturists of limited resources; promotion of greater consumption of aquaculture products; increase intra-regional trade in aquaculture products.
- 12 <http://www.fao.org/blogs/blue-growth-blog/coastal-fisheries-on-the-agenda-in-guayaquil-ecuador/en/>
13. <http://www.fao.org/blogs/blue-growth-blog/helping-to-reduce-bycatch-in-latin-america-and-the-caribbean/en/>
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Section II

**Blue economy strategies and conflicts with
small-scale fisheries in Latin America**

Chapter 4

Overview of international blue investments in Latin America

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National blue investments in coastal states

The report characterizes the general patterns of investment by select international donors in Latin America (n= 7,437 and USD 121 billion) (Figures 2, 3 and 4). Between 2012 and 2020, Brazil was the largest recipient of projects both in numbers (considering all donors) and total investment value (considering all donors except CAF, wherein it ranked the second after Ecuador in total investment). The least supported country is Nicaragua, featuring among the three least supported countries by all donors.

It is evident that IDB is proportionally the largest investor in all studied countries while the World Bank has the largest average investment rate (except in Costa Rica). We identified 494 blue investments predominantly in coastal states (USD 13.3 billion) (Figure 2 and 3), largely by IDB (n=299), UNDP (n=91), GEF (n=76), World Bank (n=22) and CAF (n=6). Brazil (n=81), Colombia (n=62), Peru (n=55) and Panama (n=54) received the largest numbers of projects, with Costa Rica (n=35) and Guatemala (n=29) at the other end.

Environmental resource management and conservation projects were the most frequent blue economy projects in coastal states (n=271) by UNDP, GEF, IDB and the World Bank. Development and use/occupation of the territory projects in coastal states second in frequency of support by IDB and, to a lesser extent, World Bank and others. The fisheries and aquaculture sector ranked sixth behind energy, tourism and transport infrastructure and logistics, and ahead of other industries, agriculture and livestock and mining sectors.

The highest investments were in coastal state development, use/occupation of territory (USD 5 billions), specially by IDB (USD 4 billion), followed by energy (USD 3.2 billion, 3.1 billion by IDB alone). Environmental resource management and conservation (USD 2.5 billion) ranked third with investments by all banks.

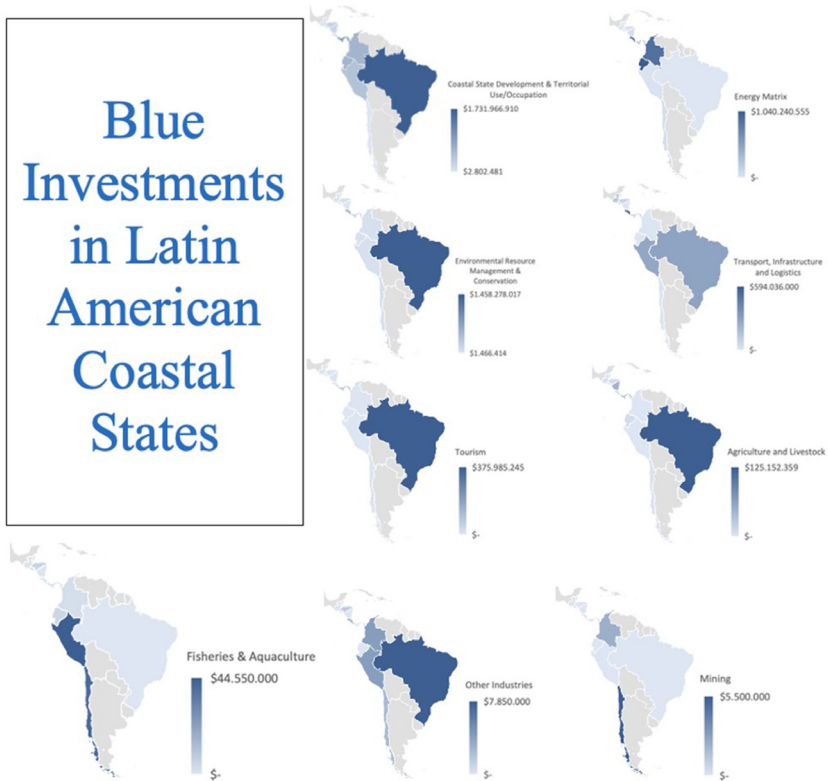


Figure 2: Total sectoral blue investments (US dollars) in coastal states across studied countries. (Brazil n=81 blue investment projects; Chile: n=48; Peru: n=55; Colombia: n=62; Ecuador: n=46; Panamá: n=54; Costa Rica: n=35; Guatemala: n=29; Honduras: n=44; and Nicaragua: n= 40.) (Only national investments)

The fisheries and aquaculture sector ranked seventh (USD 174.7 million, including USD 115 million by World Bank; USD 54 million by IDB; and USD 5 million by UNDP). On total investments in sectors, it stood behind transport infrastructure and logistics, tourism and agriculture and livestock; and ahead of other industries and mining.

Global and Regional Blue Investments Interfacing Latin American Coastal States

In general, international and regional investments indicate a focus on sustainable cities and food production, energy and transport efficiency, climate change and transboundary water management. Approximately USD 1 billion have been assigned to regional (USD 233 million) and global (USD 836

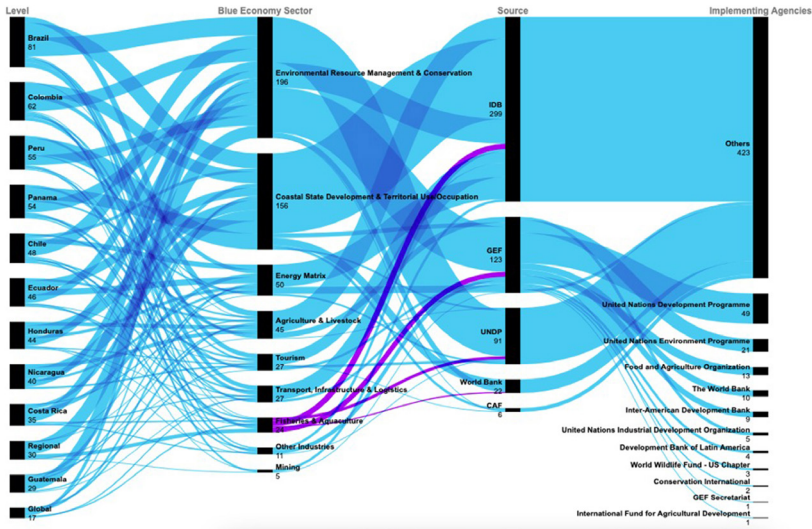


Figure 3 – Alluvial diagram of the number of blue projects in Latin American coastal states, by five assessed organizations with varying implementing agencies across ten studied countries between 2012 and 2020 (global and regional projects included).

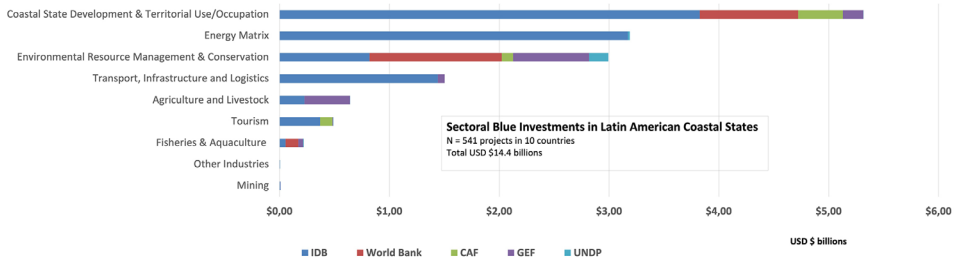


Figure 4 – Sectoral blue investments in Latin American coastal states, by five assessed organizations with varying implementing agencies across ten studied countries between 2012 and 2020 (global and regional projects included).

millions) blue projects (n=47) encompassing multiple countries/continents interfacing the ten Latin American countries between 2012 and 2020. These investments are mostly by GEF (n=43) but also IDB (n=4) (Figure 5).

Brazil has participated in the greatest number of global (n=7) projects, followed by Costa Rica (n=6) and Peru (n=6). Colombia participated in the largest number of regional projects (n=12), followed by Ecuador (n=11) and Brazil (n=10). Honduras, Guatemala, Chile and Nicaragua participated in much less or none of such projects (Figure 5).

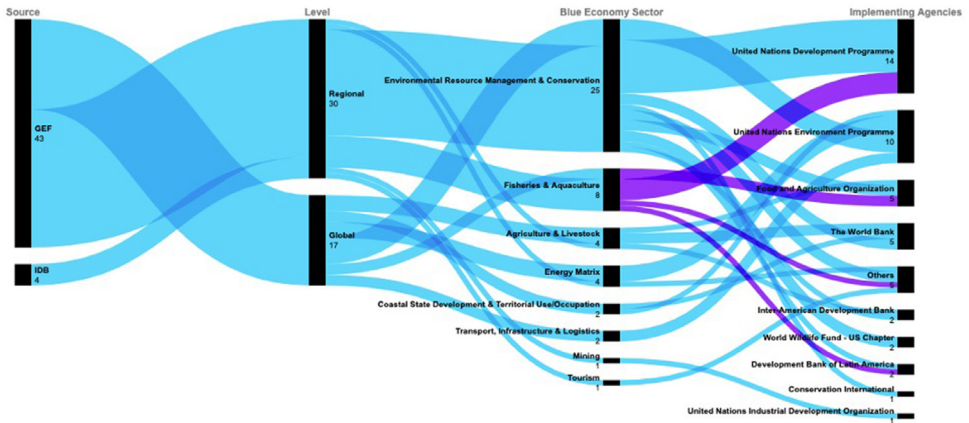


Figure 5 – Alluvial diagram of the number of global and regional blue projects in Latin American coastal states, by the Global Environmental Facility (GEF) and Interamerican Development Bank (IDB), with varying implementing agencies across ten studied countries between 2012 and 2020.

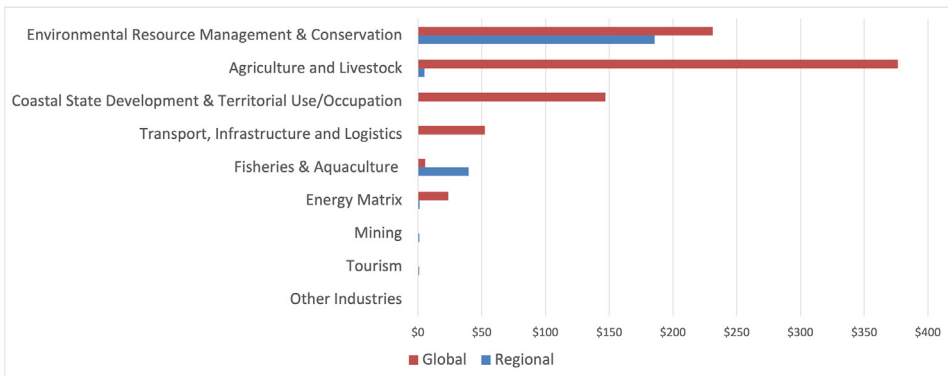


Figure 6 – Relative number of global and regional blue projects in coastal states, by the Global Environmental Facility (GEF) and Interamerican Development Bank (IDB), across ten studied countries between 2012 and 2020.

The Environmental Resource Management and Conservation sector is the greatest regionally and globally supported blue investments in Latin American coastal states in total number of projects and investment value (n=25; USD 317 millions) (Figure 6).

Fisheries and aquaculture (n=8) ranked second in number of regional and global projects and fifth in total invested value (USD 45 million). Projects assessed were implemented by UNDP (n=4), FAO (n=3), CAF (n=1) and others (n=1; by national governments).

We identified 15 regional or global projects with direct implications to SSF (Box 9).

Box 9: Important global and regional blue projects with direct implications in the context of SSF in assessed Latin American countries

1. “The ‘Global Sustainable Supply Chains for Marine Commodities’ project (USD 5.5 million by GEF) involved four countries (Costa Rica, Ecuador, Indonesia and Philippines) and implemented by UNDP with the objective of mainstreaming sustainability into seafood supply chains through market and policy mechanisms and goal of rebuilding and protecting fish stocks and livelihoods.
2. The ‘CFI: Coastal Fisheries Initiative (PROGRAM)’ (USD 6.5 million by GEF) involved six countries (Cote d’Ivoire, Cabo Verde, Ecuador, Indonesia, Peru e Senegal) and was implemented by FAO with the objective of demonstrating ecosystem-based fisheries governance.
3. The “‘BE-CLME+’: Promoting National Blue Economy Priorities Through Marine Spatial Planning in the Caribbean Large Marine Ecosystem Plus’ project (USD 6.2 million by GEF) is implemented in six countries (Barbados, Belize, Guyana, Jamaica, St. Lucia and Panama).
4. Integrated Transboundary Ridges-to-Reef Management of the Mesoamerican Reef.
5. Integrated water resources management in the Merín Lagoon Basin and Coastal Lagoons.
6. Improving Mangrove Conservation across the Eastern Tropical Pacific Seascape (ETPS) through Coordinated Regional and National Strategy Development and Implementation.
7. Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach.

8. Towards Joint Integrated, Ecosystem-based Management of the Pacific Central American Coastal Large Marine Ecosystem (PACA).
9. Enabling concerted Source to Sea management in the Paz River watershed.
10. Setting the Foundations for Zero Net Loss of the Mangroves that Underpin Human Wellbeing in the North Brazil Shelf LME.
11. Catalyzing Implementation of the Strategic Action Programme for the Sustainable Management of Shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems (CMLE+);
12. Sustainable Management of Bycatch in Latin America and Caribbean Trawl Fisheries (REBYC-II LAC).
13. Catalyzing Implementation of a Strategic Action Programme for the Sustainable Management of Shared Living Marine Resources in the Humboldt Current System (HCS);
14. Coastal Fisheries Initiative- Latin America.
15. CARICOM-Brazil: Tourism and Trade Promotion Initiative (IDB, 2012).

Our analysis highlighted crucial gaps across the online repositories of conflicts and investments. Most prominently, it showed the absence of readily available geographic information on the location of investment impacts on the ground, hindering the capacity of ocean advocates (e.g., social-environmental justice organizations) to monitor the rapidly evolving and interlinked (multi-sectoral, interconnected) blue economy taking shape in Latin America.

Chapter 5

Assessing conflicts and injustices reported in online platforms

Co-authors: Leopoldo Cavaleri Gerhardinger; Lucas Milani Rodrigues.

Overview of blue economy impacts on Latin American small-scale fisheries

A total of 192 conflict/injustice reports were identified in ten Latin American countries (Figure 7) at the following databases: Environmental Justice Atlas (EJA: n=60); Fiocruz (n=61); Comissão Pastoral da Pesca (CPP: n=39); and Information System on Small-Scale Fisheries (ISSF: n=10); and New Records by the current study (n=22) (Figure 8).

It is important to note that these reports and the data analyzed are by no means representative of the total amount of conflicts and injustices faced by SSF in Latin America and should be cautiously interpreted—indeed most conflicts/injustices at sea remain underreported. Gaps in information on conflicts in all coastal states require attention for future social-environmental justice assessments in the region (Figure 7).

A total of 34 types of secondary conflicts (175 mentions), 15 types of ‘damage to health’ (186 mentions), nine blue sectors (499 mentions; Figure 8) and 49 types of goods under dispute (148 mentions) across 224 places were coded against all 192 conflict reports.

The high frequency of associations per conflict report to more than one such variables involved highlights the multi-dimensionality of existing reports of blue economy impacts to SSF.

Following the available dataset, the most impactful blue economy drivers/sectors to SSF in the studied countries (Figure 9) can be linked with conflicts generated by urban/rural development (changes in use/occupation of land), issues with the installation and operation of transportation infrastructure, environmental conservation and resource management, expansion of energy matrix, and operation of fisheries and aquaculture, mining and tourism industries.

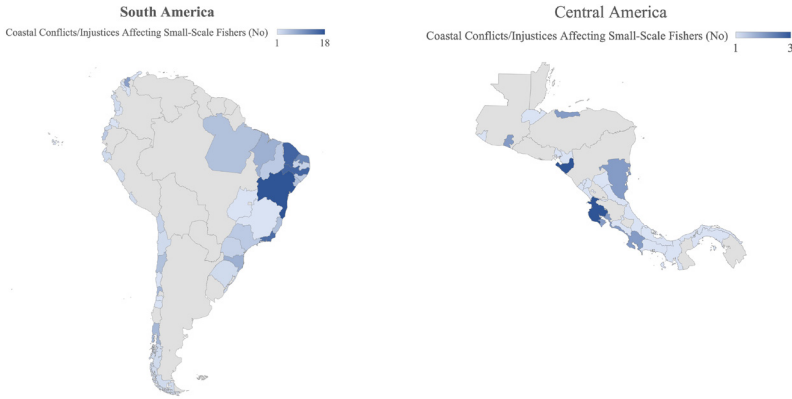


Figure 7: Number of coastal conflicts affecting SSF recorded in South American states (based on n=166 reports depicting conflicts in n=191 places) and Central American states (n=26 reports, n=33 places).

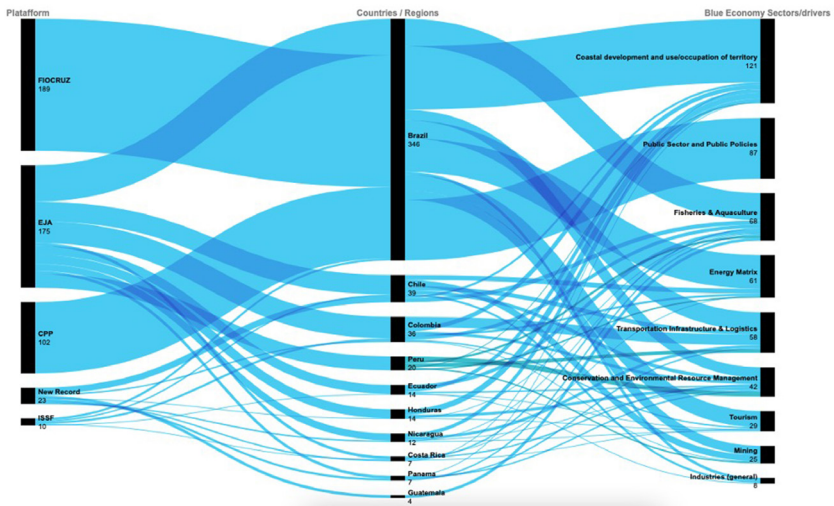


Figure 8: Alluvial diagram depicting the classification of conflict records from all assessed databases associated with respective blue economy sectors across studied countries (prepared by authors with information retrieved from assessed databases (n=192 records; n=499 relationships once each report can be linked to multiple sectors).

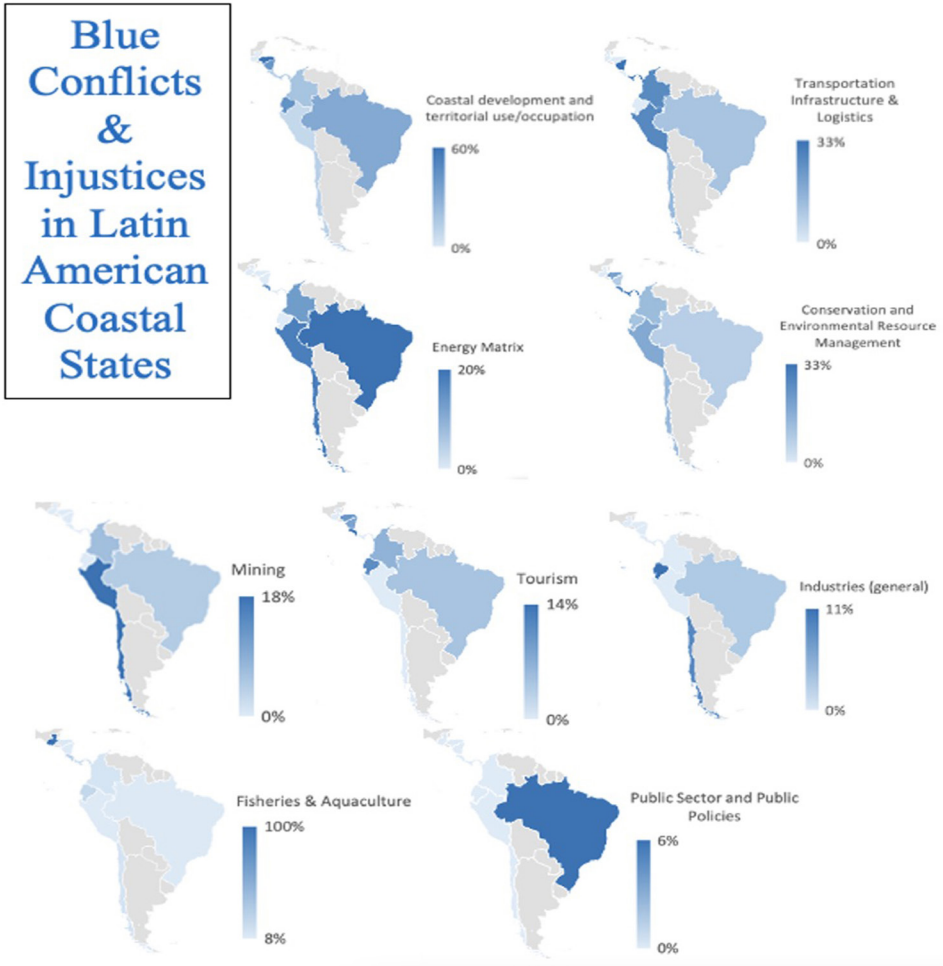


Figure 9: Variations in country-based percentage of linkages between total reported blue conflicts/ injustices towards SSF in coastal areas across studied countries (Brazil: n=118 conflict/injustice reports corresponding to n=346 linkages to blue economy sectors; Chile: n=17/n=39; Peru: n=7/n=20; Colombia: n=17/n=36; Ecuador: n=7/n=14; Panama: n=6/n=7; Costa Rica: n=7/n=7; Guatemala: n=4/n=4; Honduras: n=4/n=14; and Nicaragua: n=5/n=12).

We have attempted to best represent the general patterns of impacts involving small-scale fishers and blue economy agents in Latin America. Even though our integrated data-set and subsequent analysis sits on top of the valuable and honorable work and reporting by fishers’ social movements and supportive organizations on the ground and at higher levels, it has important limitations.

Whereas it would be optimal to develop and apply a suite of methods to capture alternative expressions of historical and contemporaneous struggles of and impacts and injustices towards fisherfolk people across these countries, our national and regional overviews were only possible given the existence of several collaborative mapping initiatives.

Section III

**Unpacking small-scale-fisheries interactions
with Latin American blue economies**

Chapter 6

Brazil

Co-authors: Deborah Santos Prado; Bianca Gabani Gimenez; Lucas Milani Rodrigues; Érica Silva Mendonça; Leopoldo Cavaleri Gerhardinger.

“What we understand about this blue economy, this sea economy is a project of death for fishing communities, riverside communities, [...] indigenous people, quilombolas (Afro-Brazilian) ... It is a project of death that we are already seeing here”.

(Key informant, Brazil)

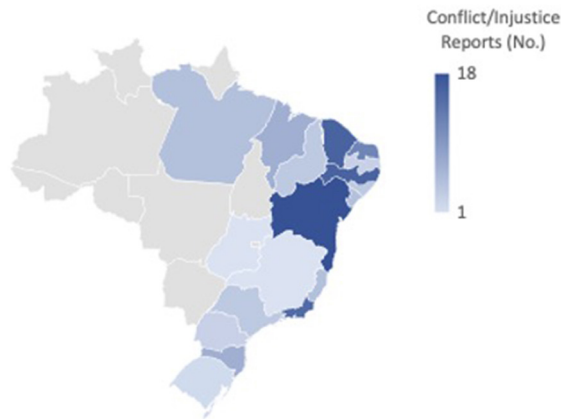


Figure 10: Number of places with conflicts/injustices records assessed across Brazilian coastal states (n=118 reports; n=128 places).

Introduction

The initiatives explicitly referred to as the blue economy are recent in Brazil and have been carried out especially by the federal government, state governments, various economic sectors and investment funds. The projects stamped with the blue economy label do not appear to include the specificities of small-scale fisheries and are largely based on hegemonic economic development projects, which are likely to further violate the rights of fishing communities. Based on the identification and analysis of 81 international blue investments

from 2012, we characterize their focus on coastal environmental conservation and development projects. Only one project was classified as belonging to the fisheries and aquaculture sector, although with a focus on environmental conservation.

Ocean governance in Brazil has always been marked by a fragmented character across multiple sectors and supported by a set of formal arrangements, under the coordination of several agencies at the federal, state and municipal levels. Such complexity pushes Brazil into severe failures in implementing and integrating the policies with the various coastal stakeholders, particularly to adequately include the diversity of artisanal fishers' representativeness in ocean development processes. In our study, we observe that despite the challenging legacy and history impinged upon small-scale fishers, the current political situation is even more challenging.

A total of 118 conflict/injustice reports affecting artisanal fishing communities have been systematized and analyzed. The main drivers of blue conflicts reported in Brazil are associated with the energy matrix (e.g., chemical and petrochemical industry, exploration and transportation of oil, wind energy, dams, thermoelectric plants, etc.) and with changes in the use /occupation of the territory. Another important cluster of 'blue' conflicts are related to the outcomes of poor coastal public policies by government agencies and the judiciary. The current Brazilian political conjuncture further reinforces the asymmetric power relations between the small-scale fishers and the agents of the industrial sector and infrastructure. Since there is a real dismantling of the spaces for civil society participation and social control that directly impact ocean governance. This chapter also identifies five challenges and four opportunities for creating an environmentally sustainable and socially equitable ocean economy in Brazil.

Challenges

- **Blue Economy Initiatives are disregarding small-scale fishing communities.** There is a lack of evidence that Brazilian blue economy initiatives have a focus on artisanal fishing and the concern to redistribute the wealth obtained from the sea more fairly.
- **Lack of international investments that prioritize the strengthening of small-scale fisheries.** The main investments are aimed at development projects in other sectors, for the use and occupation of marine territory, or for the conservation and environmental management of marine resources.

- **Blue Economy Initiatives have accentuated environmental injustice.** We can identify hundreds of cases of conflicts and environmental injustice affecting small-scale fishing communities along the coast. Most of these conflicts are associated with the coastal development policies themselves, which are priorities for the blue economy initiatives underway in Brazil.
- **Spaces for the participation of artisanal fishers in decision-making have been dismantled.** The current Brazilian political conjuncture further reinforces the asymmetric power relations between the small-scale fishing sector and the agents of the industrial sector and infrastructure, since there is a real dismantling of the spaces for civil society participation and social control that directly impact ocean governance.
- **Low political credibility for a socially and environmentally sustainable blue economy.** The rhetoric of sustainability exposed by the Brazilian government when referring to the blue economy initiatives is permeated by intense contradictions, since recent episodes show a drastic reduction or lack of surveillance or sanctions of environmental crimes, the flexibility of the environmental licensing system for activities that cause impacts, and the deactivation of the Coastal Management Integration Group.

Opportunities

- **Inclusive governance of the ocean.** Claiming the resumption of spaces for inclusive governance of the oceans (on the agendas of marine protected areas, marine spatial planning, coastal management and environmental licensing).
- **Investments for small-scale fishing.** Identifying investment initiatives and possibilities (even though scarce) to strengthen small-scale fishing, taking into account its social, economic and environmental dimensions.
- **Public Projects and Policies.** Identifying political opportunities to give visibility to the environmental, social, territorial and economic agenda of small-scale fishing, especially in the context of the UN Ocean Decade and other ongoing projects.
- **Promoting learning networks.** Strengthening socio-technical learning networks in favor of an environmentally appropriate and socially fair blue economy agenda, with the participation of Brazilian and Latin American social movements, along with other networks of articulation between academia, civil society and government entities.

Chapter 7

Chile

Co-authors: Francisco Araos; Ricardo Álvarez; Carlos Hidalgo; Jeremy Anbleyth-Evans; Lucas Milani Rodrigues; Erica Silva. Mendonça; Leopoldo Cavaleri Gerhardinger.

“What we have been seeing is that the term [blue economy] is ‘camouflaged’ with other things, it comes out only when they have to do business, the blue economy comes out to clean up, but they have it practically underground, and that is what worried us the most”

(Key informant, Chile)

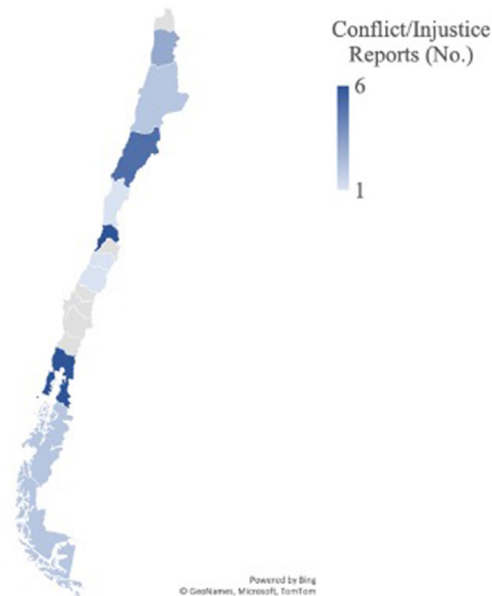


Figure 11: Number of places with conflicts/injustices records assessed across Chilean coastal states (n=17 reports; n=31 places).

Introduction

Chile’s coastal communities enjoy a coastline of at least 8,385 km, with some of the highly productive marine ecosystems of the Pacific Ocean. Nevertheless, the neoliberal changes of the late 1970s live on, continuing

the focus on the private commodification of the ocean commons. Industrial fisheries and aquaculture, continues to be incentivized, as does mining and energy production, and coastal development. The SSF economy supports at least 100,000 artisanal fishers officially registered, and some 500,000 people associated directly or indirectly. The blue economy narrative in Chile is mainly promoted by international organizations and private donors. The investments have been concentrated in the main sectors of Chilean economy. Over the last few years they have been primarily concerned with conservation and environmental resource management. SSF have poor participation in the blue economy narrative; it is perceived to be a ‘green washing’ of polluted and unjust economic activities. The areas described as sacrificial zones across the country are evidence of the blue economy’s conflicts and challenges. Emergent actions promoted by multiple action-networks face this critical scenario by encouraging marine democracy at local, regional and national levels. Social movements and several organizations continue to confront the privatization of the marine commons in order to enhance the SSF economy, all the while strengthening capacity to adapt to climate change and biodiversity loss.

Challenges

- **Confront ocean grabbing:** Enhance collective rights and ad-hoc institutional arrangement to reduce the private commodification of the marine commons.
- **Encourage SSF and indigenous people’s alliances:** Establish mutual agreements related with the common use of marine resources and spaces.
- **Support multi-stakeholder networks:** Articulate political spaces and arenas to joint SSF local organizations with intermediary actors (*e.g.*, scientists, NGOs, civil society).
- **Strengthen media and press divulgation of injustices:** Communicate the injustices of blue economy.

Opportunities

- **Enhance inclusive marine governance:** Encourage marine democracy at local, regional and national level. This challenge can be achieved by scaling existing ancillary and complementary marine conservation arrangements oriented to SSF livelihoods; by modernizing TURFs co-management processes and institutions; by strengthening processes

of association among fisher unions horizontally between regions and organizational social capital.

- **Face conflicts and injustices:** Support social organization and institutional arrangements (*e.g.*, Marine Reserves and Marine Coastal Areas of Indigenous People that confront the private commodification of the marine commons. This opportunity requests to develop participatory marine management and spatial planning, knowledge dialogue using citizen's science tools to raise evidence claims and to develop participatory assessments.
- **Support SSF Economies:** Set SSF at the centre of a food system that places food security and sovereignty as the main objectives of the blue economy. This opportunity requests the reorientation of the artisanal fishing economy towards stronger internal market networks, instead of continuing to prioritize foreign markets; a reduction in the incidence of intermediaries; designing of mechanisms for the commercialization of small-scale fishing and traceability of catch.
- **Climate change adaptation and transformation** Reorient international blue economy investments to SSF local and regional action. This opportunity requests to enhance capacity building to face extreme and slow-onset effects of climate change.

Chapter 8

Peru

Co-authors: Naetê Barbosa Lima Reis; Marcelo Aranda Stortti; Lucas Milani Rodrigues; Erica Silva Mendonça; Leopoldo Cavaleri Gerhardinger

“...the blue economy is basically providing, increasing the number of jobs or ways of extracting value from marine resources, but the value defined there is the economic value, it is not the social, sociocultural value, value of health, nutrition and other aspects of value that should be considered...I see it as a new push for neoliberalism towards marine resources, and also a way in which some private and large actors can take advantage of that language to benefit without providing additional value, a new way of living, a better livelihood and better well-being to coastal communities.”

(Key informant, Peru)

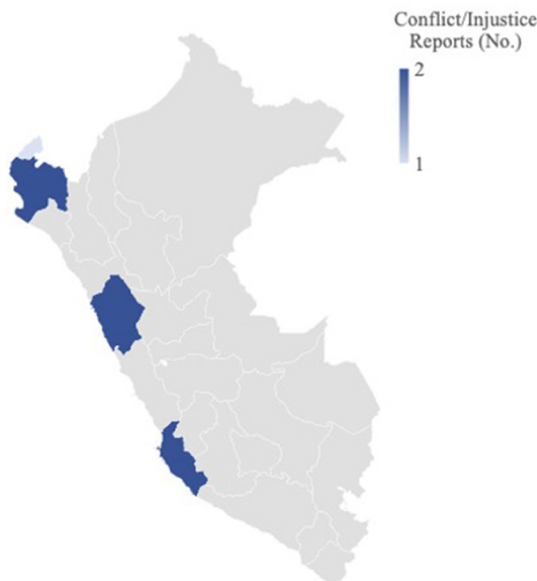


Figure 12: Number of places with conflicts/injustices records assessed across Peruvian coastal states (n=7 reports; n=7 places).

Introduction

Among the 860 foreign investments identified in Peru between 2012 and 2020 by international organizations/banks, our study evaluated 55 blue projects. The focus of these initiatives is on coastal development and

territorial occupation/use, as well as those aimed at the conservation and management of environmental resources. The sectors with less support were focused on agriculture and livestock, fishing and aquaculture, energy and transport, tourism and other industries. Despite the relevance of international investments for the maintenance and expansion of economic activities associated with the perspective of the blue economy, such projects still need greater public scrutiny based on metrics that properly include the concepts of environmental justice and economic sustainability in order to strengthen processes democratic environmental management systems in Peru. Blue projects with an interface in fisheries still need to prioritize small-scale fisheries. In Peru, the application of the blue economy concept seems to focus mainly on the claim of a possible increase in the number of jobs and in the extraction of marine resources. However, it still does not adequately include social and cultural values related to artisanal fisheries. The blue economy appears to meet the agenda of big businesses with an extractive agenda, to the detriment of the well-being and livelihoods of coastal artisanal fishing communities. Our analysis indicates the six main challenges and four opportunities facing small-scale fisherfolk organizations in Peru.

Challenges

- **Coastal management model without effective community participation:** Peruvian coastal management is associated with management measures dominated by specialists and experts, without the right space for the recognition and valorization of the knowledge of traditional coastal communities. In addition, the dissemination of information on methodologies for the formulation and implementation of instruments, plans and specific programmes for coastal management, has historically been insufficient. This distances actors linked to marine coastal areas from a real governance process over their territories. In this context, environmental management becomes a tool that promotes environmental, social and cognitive injustice, given the implementation of inadequate standards implemented without the proper participation of local communities.
- **Rapid economic and demographic growth, concentrated on the coast without adequate coastal management:** The country presents a complex and challenging framework for coastal management, given the rapid economic and demographic growth concentrated on the

coast. The coastal development model has generated a deep territorial imbalance, exposing the population and traditional communities to a series of impacts, including the risks associated with climatic emergencies. Another issue concerns pollution of coastal waters, poor management of solid waste and water resources and increasing erosion. This exposes the fragility of the hegemonic model of coastal management and the importance of implementing an ecosystem basis for integrated coastal management. In addition, marine-coastal territories have been severely affected by contaminants, both in the North and the South of the country. The situation is extremely serious, since the mining companies operate in coastal locations, and currently within five nautical miles, restricted to artisanal fishing.

- **Governmental actions unfavorable to the artisanal fishing sector:** Processes of concession of marine areas by the State to private companies, in order to strengthen the aquaculture sector, according to our informants, have not been adequately discussed with all interested parties, mainly harming the artisanal fishing. Artisanal fishing communities must have adequate space to participate in the process of granting areas for aquaculture, to ensure that the rights of traditional coastal communities are respected. The participation of all interested sectors increases the possibility of suitability of the processes, a fundamental step to avoid environmental injustice. Another point is related to the asymmetries in the sectorial investment policy that historically favored the industrial fishing sector over artisanal fishing, leaning towards a growing scenario of depletion of fishing stocks and biodiversity.
- **Absence of multisectoral approaches including socio-economic themes for fisheries planning and legal reform to eliminate overlapping attributes:** Fisheries planning has historically been inadequate, without due transparency in monitoring and evaluation for each fishery, so that it is possible to produce specific and more reliable indicators. It is necessary to have more rigour in the catch control, evaluating the fulfillment of the established goals. This applies to the monitoring of global catch quotas, the minimum size for commercialization, the authorized fishing gear, the allowed equipment, among other points. Another issue concerns the free access to information concerning each fishery, so that the data are transparent and can be discussed by interested parties. In Peru there is no overexploited category, and among 101 commercially important species, only six were categorized according to their level of exploitation, making

it urgent to expand the application of existing legislation. The established ROPs present weaknesses, including management measures without the minimum size for capture, making it difficult to monitor fisheries landings. Thus, it is necessary to adapt the ROPs to serve multispecies fisheries, especially coastal species. There is also a need to update the register of fisherfolk and their vessels, given that under the current conditions, most act in the informal sector. Articulations with culturally differentiated communities, specifically historically subordinated groups, should be a priority so that the interests and worldviews of these groups can contribute a lot of knowledge, paving the path for resistance and confrontation to climate emergencies and the unsustainability put in place by the hegemonic system.

- **Devaluation of artisanal fishing communities:** One of the main problems faced by the artisanal fishing class is the illegality and informality of the artisanal fishing sector. This lowers the quality of data necessary to better understand the sector's limits and possibilities. Another challenge is related to the low adhesion of the artisanal fishing sector to the accreditation of individual fishing licenses, mainly associated with the lack of economic resources and the lack of procedures necessary for formalization. It is urgent to create and adapt public policies, focused on overcoming the social, environmental, cultural and economic injustice that has historically affected artisanal fishing communities. In addition, there are organizational challenges for artisanal fishing communities. For example, intersectoral issues that arise from intense lobbying of the oil and mining sectors. This benefits certain fishing communities to the detriment of others, strengthening the disarticulation of the social organization of the artisanal fisheries sector.
- **Fragility in the valuation of the artisanal fishing value chain and difficulties in Food Safety Certification:** Major problems are associated with the implementation of transport and logistics infrastructure harmful to the maintenance of fishing territories. On the northern coast of Peru, for example, growing speculation in the real estate sector, coupled with the growth of the tourism markets, has led several fishing communities to migrate to the tourism sector because the artisanal fisheries productive chain has been unstructured. One of the main obstacles to the commercialization of fish caught by artisanal fishing communities is the difficulty of meeting sanitary requirements for commercialization. Without the proper structure, the artisanal fishing sector encounters a series of

barriers to benefit, conserve, store, distribute and commercialize fish. There must be concrete alternatives, as fish is mostly sold to middlemen, who pay insignificant amounts for catches, exposing fishing communities to food insecurity, given their increasingly precarious income. What makes it worse is the lack of investment in the artisanal fishing productive chain; also the difficulty in regularizing artisanal fishing communities and their vessels. It is very necessary that the catches are duly certified by the health surveillance agencies, a fundamental step for the commercialization of fish.

Opportunities

- **Propose and implement public policies to protect fragile ecosystems in coastal marine areas, considering and supporting local communities:** Despite not being able to reach more than 50 percent of the goals established by the Strategic Plan for Biological Diversity (2011-2020), Peru has processes for expanding partnerships with other countries and entities in the environmental arena. These links offer opportunities for exchanging experiences in managing biodiversity and developing public policies for the sector. It is important that the creation of the National Grade Tropical Sea Reserve—including 116,000 hectares—be completed, so that the coastal environment is better protected. Our informants reported that while artisanal fishermen request the prompt creation of the reserve, with a central role in maintaining the artisanal fishing sector, representatives of the oil and gas sector seek to intervene so that there is coexistence of protection of the area, concurrently with hydrocarbon exploration activities in the region.
- **Reforms in the fisheries management system, with the main focus on valuation and inclusion of artisanal fishing communities:** The reform of the fisheries governance system, built on a legal framework and the rights of traditional communities, may favour the establishment of adequate working conditions and the participation of these groups in the fisheries planning of their territories. The creation and maintenance of properly formalized spaces that increase the participation of artisanal fishing communities in the formulation of policies aimed at the sector is a historic demand that needs due attention from the State. There is also a need for free and transparent access in relation to the methodologies involved in the production of information on each fishery and the scientific bases adopted, as well as the permanent inclusion of artisanal

knowledge for an increasingly horizontal fisheries governance, guided by local ecological knowledge. Intercultural partnership, including universities and local communities, can strengthen tools for fisheries governance fully understood by the social actors involved, based on appropriate scientific and community references, essential for efficient management.

- **Local and territorial development based on the strengthening of the productive chain of artisanal fishing:** Artisanal fishing is a sector that offers great opportunities for work and income. It needs investment from the State and the strengthening of the social and political organization of artisanal fishers. The implementation of work and income generation ventures requires the strengthening of processes of articulation and association between the different artisanal fishing groups so that, from an associative perspective, actions aimed at improving the market, health certifications and to the disposal of fish. According to our informants, it is necessary to call the government's attention to the importance of artisanal fishing and that the governments involved with the sector are open to listening to the local population. They need to broaden their view beyond the management of marine and aquatic living resources, including in its guidelines the well-being of the population and the fight against food insecurity. Thus, the strengthening of the national political organization would be critical in the opinion of our informants, to correctly place the development of artisanal fisheries policy within the context of the largest fishing workforce, represented by small-scale Peruvian fishermen. Discussing the representativeness of artisanal fishing communities in the country's coastal management policy is a fundamental step in order to overcome the hegemonic extractive perspective, which historically does not include the artisanal fishing sector.
- **Government implementation of a National Policy for Integrated Coastal Zone Management (ICZM):** Integrated coastal management as the political agenda of the Peruvian government is of great relevance, given the rapid demographic growth concentrated in the coast. The concentration on the coast reaches 60 percent of the country's population, generating a series of synergistic environmental impacts that directly affect the quality of life of the coastal population, in particular, the effects of climate change. There are concrete political opportunities that rely on external support, such as those promoted by the IDB, in conjunction with the Peruvian government, aimed at a future GIZC National Policy. However, for an increasingly integrated management model, the policy

must provide answers to the three main dimensions of integration: socio-ecological, socio-economic and cultural and governance. For this reason, the model chosen must support local communities in marine coastal areas, a task that must be assumed by current and future government, as well as through international cooperation. It is also necessary to incorporate the ICZM into the government's political agenda, to approve the ICZM guidelines and laws and to create coordination tools. The current context presents an important turning point for the country to take advantage of concrete government policy opportunities for integrated coastal management, or to continue with a governance context that promotes unsustainability.

Chapter 9

Ecuador

Co-authors: Adrian Ribaric; Lucas Milani Rodrigues; Erica Silva Mendonça; Leopoldo Cavaleri Gerhardinger.

“Look, for me the blue economy is like a requirement of the European countries, which sooner or later will also have an impact on commercialization, it is like a business to justify all the damage they have done to the planet, to our seas, with the exploitation of gas, with the exploitation of oil, with the issue of mining, the issue of dirty water, tourism ... that is, they want to justify in some way with that little name, because first it was the green seal, now it is the blue seal... but what I see at this moment in my country, in terms of fisheries, is chaos ... if urgent rules are not adopted, sanctions and controls...”

(Key Informant, Ecuador)

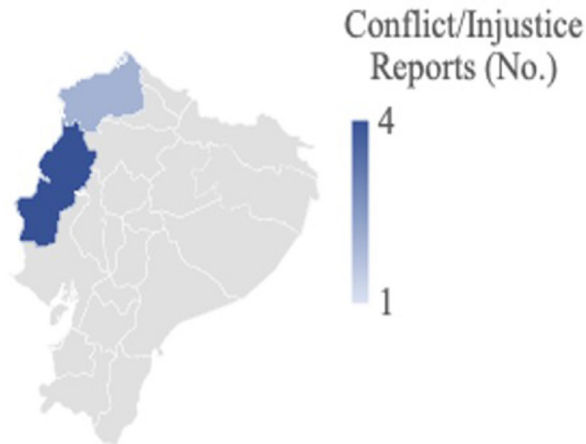


Figure 13: Number of places with conflict/injustice records assessed across Ecuadorian coastal states (n=7 reports; n=7 places).

Introduction

Ecuador maintains an intense relationship with its coastal and maritime spaces, the mainstays of its economy and cultural identity. The Ecuadorian

coastal maritime space, defined in Ecuador's accession to the UN Convention on the Law of the Sea (UNCLOS) on September 24, 2012, covers an extensive territory that represents more than five times the entire land area of the country. It includes important mutually affected terrestrial and marine ecosystems where almost half of the population is concentrated and a significant portion of the national Gross Domestic Product (GDP) particularly in the oil, fishing and aquaculture production chain, and marine transport and tourism sectors.

Ecuador has developed important maritime governance experiences that include the Oceanica y Costera Policy (POC), the Marino y Costero Spatial Planning Plan, the Environmental Law and Regulation, the Aquaculture and Fishing Law, the Ley de Navegación Project y Protección Marítima, and Ley Orgánica del Régimen Especial de Galápagos, among other local and regional initiatives, such as the Normative Framework for the Sustainable Blue Economy of the Andean Parliament. The investments identified in the fisheries and aquaculture sector are of particular importance in the context of this study.

The IDB project entitled 'Competitiveness of Mangrove Concession Communities in the Gulf of Guayaquil' (approved in 2017), as well as those of UNDP: 'Global sustainable supply chains for marine commodities' (2014/2015), and 'Global Marine Commodities' (2018-2020), aims to improve the competitiveness of fishermen and their organizations in the adoption of certified standards that consider sustainability criteria. It is worth mentioning the pilot project developed by GIZ/WWF-Ecuador in collaboration with the Viceministerio de Acuicultura y Pesca, the Ministerio de Ambiente y Agua, the GAD Municipal of Puerto López, the administration of the Machalilla National Park and the Cantagallo Machalilla Marine Reserve, with the association of artisanal fishermen in the province of Manabí, which aims, by tackling the socioeconomic impacts of the COVID-19 pandemic, to strengthen artisanal fishing as a sustainable and responsible practice for the health of the oceans. Our assessment generated five main challenges and four opportunities for SSF in the context of blue economy/growth in Ecuador.

Challenges

- **Reconcile policies to encourage economic growth with the constitutional principles of Buen Vivir**, specifically in relation to the rights of Nature and respect for ancestral groups and populations

(indigenous and non-indigenous as extraction workers and artisanal fishers). Governmental initiatives and private capital for economic development are based on a unilateral view of the Blue Economy, understood exclusively from the perspective of economic growth, particularly expressed in projects for the implantation of port and industrial infrastructure (oil), and in the promotion of the fishing export sector.

- **Loss of biodiversity due to environmental degradation, including:** declining mangroves, expansion of pasture, urban, port and tourism development, impacts on freshwater systems, human waste and contamination. Population growth in the coastal region, the installation of port infrastructure and the oil industry are responsible for the decrease and drastic degradation of observed marine and coastal environments, particularly in the Gulf of Guayaquil.
- **Vulnerability of the marine environment to climate change.** The Ecuadorian marine environment is especially vulnerable to variations in the El Niño phenomenon and to any sudden changes in sea currents, both of which are extremely sensitive to climate change.
- **Pressure on fish stocks by international fleets.** The richness and abundance of biodiversity found in the Ecuadorian marine space has attracted large fishing fleets from different parts of the world, spatially from Asia and specifically from China, whose intensity and reprehensible practices have put local stocks at risk (migratory and demersal pelagics). The presence of international fishing fleet on the borders of the Ecuadorian Territorial Sea, mainly around the Galapagos archipelago, has intensified significantly in recent years. The lack of control over the presence and practices of this fleet is crucial for the socio-environmental sustainability of regional fisheries.
- **Low adherence and knowledge of traditional fishing communities to the principles of the blue economy,** understood, at most, as another foreign movement with little or no practical impact on and for their lives.

Opportunities

- **Constitutional Principles conducive to receiving proposals for modeling the productive and energy matrix from Millennium Development Goals' horizons, specifically related to the Buen**

Vivir proposal. Nature rights and respect for traditional/ancestral groups and populations (indigenous and non-indigenous). Considered the most important planning tool, the National Plan of Buen Vivir is structurally receptive to the guiding principles of the SSF Guidelines. The inseparability of the environmental and socio-cultural aspects involved in overcoming poverty, marginality and structural discrimination is central to this approach. This context opens up broad perspectives for dialogue and tests the State's institutional capacity to build public policies and a *buen vivir* agenda, based on local experiences and the guarantee of the rights of artisanal fishers over the marine territory.

- **Long-term institutional experience in maritime governance,** including the Oceanic and Cosmic Policy (POC), the Plan for Spatial Maritime and Coastal Planning, the Environmental Law and Regulation, the Aquaculture and Fishing Law, the Navigation and Marine Protection Law, and Organic Law of Special Regime Galapagos, among other local and regional initiatives, such as the Normative Framework for the Sustainable Blue Economy of the Andean Parliament.
- **Artisanal fishing sector (mainly coastal and maritime), with significant political bargaining power due to its economic importance in the fishing productive chain.** The importance of artisanal fishing for the Ecuadorian economy, both from a formal point of view (income and productivity), as well as systemic (environmental services), is responsible for the insertion of the sector as a qualified interlocutor in territorial and environmental management programmes. Although quite regionalized, the social organizations of artisanal fishers are active and representative of their different positions.
- **The system of marine and coastal protected areas is broad, representative and strategically implemented.** Between 2012 and 2016 the proportion of continental marine-coastal territories grew by 78 percent, although it still presents problems related to management plans mainly in mangrove areas.

Chapter 10

Colombia

Co-authors: Paula Satizábal*; Lina M. Saavedra-Díaz*; Gina Noriega; Yulibeth Velásquez-Mendoza; Isabela Figueroa; Lucas Milani Rodrigues; Erica Silva Mendonça; Leopoldo Cavaleri Gerhardinger. * These authors contributed equally to this work

“So now it [the ocean economy] is really called the ‘blue economy’, but this comes from many years ago ... these effects that have been made to coastal communities, where development projects have been carried out on their territories without taking them into account, this has always been happening...”

(Key-informant, Colombia)

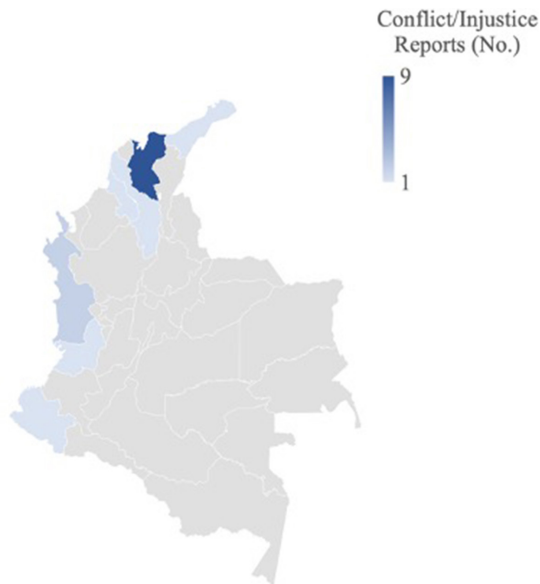


Figure 14: Number of places with conflict/injustice records assessed across Colombian coastal states in this study (n=17 reports; n=18 places). Please visit the Justicia en Territorios Pesqueros (Justice in Fishing Territories: <http://pescayjusticia.unimagdalena.edu.co/>) database to access a systematic analysis of human-rights violations in the SSF sector discussed by the Constitutional Court of Colombia, which reveals serious violations in all coastal departments. Importantly, however, most conflicts/injustices experienced by SSF in Colombia remain unreported.

Introduction

In Colombia, there is still no clear definition of the blue economy or its implications for both society and oceans. At the national level, the blue economy has emerged as a political agenda promoted by the Vice Presidency of the Republic of Colombia and the Colombian Ocean Commission as an engine for sustainable development in maritime and coastal areas. Within this framework, alliances are being built between the various economic sectors from an extractive point of view and from the economic exploitation of the oceans. These sectors, both public and private (national and international) have interests in the expansion of extractive industries (mining and hydrocarbons), port infrastructure, tourism, industrial fishing, marine protected areas, and the development of 'blue carbon' initiatives for the payment for ecosystem services, among others.

To a large extent the blue economy is being financed by entities such as the IDB, UNDP, GEF, and private companies. Moreover, the supposed environmental and economic benefits of this political agenda are being positioned as key components of the national economic reactivation and repowering agenda in the context of the COVID-19 pandemic. The blue economy initiatives represent primarily the interests of private and State actors and in some cases even those of illegal armed forces, which often emerge as a threat to the ideals, ways of life, traditions and customs of fishing communities. For instance, the 2020 national policy 'Colombia Potencia Bioceánica Sostenible 2030' (Conpes 3990) does not recognize the importance of the artisanal fishing sector and its participation in negotiating coastal and marine public policies. Fishing communities have historically been denied opportunities to actively participate in the development of economic projects, amplifying political, economic and social asymmetries of power.

Frequently framed as a threat to coastal ecosystems, fishing communities are also being targeted and criminalized by emerging regulatory frameworks that are increasingly constraining their mobilities, traditional fishing practices, access to value chains, livelihood opportunities, and customary control and access to marine resources and spaces (for example: Resolution 2281 2016 [laissez-passer], Law 1851, 2017 [illegal fishing], Decree 281, 2021 [prohibition of shark fishing], Sentence C-148, 2022 [prohibition of sport fishing]). Concurrently, blue economy investments facilitate the privatization and enclosure of coastal-marine areas for economic and/or biodiversity conservation purposes, fueling the grabbing, dispossession and at times

the destruction of fishing territories, with uneven and gendered impacts on traditional fishing communities, including Indigenous, Afrocolombian and Raizales peoples. This is relevant considering the leading role that Colombia is playing in reaching the target of 30% of Marine Protected Areas (MPA) by 2030 on 2022, while also planning on expanding the number of no-take fishing zones and increasing regional monitoring and surveillance of fishing practices.

There is an urgent need to open spaces for participation and recognition of the rights of the artisanal fishing sector and coastal communities, unifying national efforts against displacement and violence, the loss of traditions and customs, as well as the destruction of traditional fishing territories and coastal livelihoods. Thus, politically foregrounding fishing communities as central to coastal and marine governance decision-making arenas is essential to evaluate the social and environmental impacts of blue economy interventions. Although the Colombian government has historically recognized the economic value of coastal marine resources and spaces within national economic and environmental policies, it has excluded and undermined the presence and relevance of artisanal fishing communities as resource users and as traditional custodians of these spaces. This situation arises from the incipient institutional governance of fisheries and the lack of understanding of the role that coastal communities play not only in economic terms, but in relation to national food security and wellbeing. In recent decades some of the demands of fishing communities have reached legal arenas (for instance, by 2021 at least 79 sentences from Colombia's Constitutional Court have discussed human-rights abuses in the SSF sector, along the last three decades) and the public debate, which has given sparse visibility to particular conflicts, however, the social impacts of decades of significant marine plunder and violence are predominately undocumented.

The human rights violations and displacement of fishing communities has implications for diverse actors within the artisanal fishing sector, demanding collectivization processes to mobilize local territorial struggles at a national level and ensure the protection of fishing communities rights to fish, to a decent job, to a healthy environment, and especially, to be included in decision-making arenas. Furthermore, there are opportunities for national civil society initiatives in the context of a changing political landscape/seascape with a new elected left-wing national government that has vowed to place life at the center, moving beyond extractive economic development and

committing to peace building; as well as in the context of global efforts from international fisher peoples' movements who are mobilizing to assert ocean peoples' customary rights and pursue the implementation of international instruments for the protection of artisanal fisheries.

Challenges

- **Limited documentation and research on the blue economy and socio-environmental conflicts in coastal and marine areas.** The conflicts between the fishing communities and external actors—public and private, as well as illegal—are part of the everyday lives of many coastal communities in Colombia. However, the lack of rigorous research and systematic documentation of these abuses and the social and environmental impacts of blue economy interventions hinders the pursuit of justice and the development of avenues for reparation and mitigation of losses caused. There is urgency in increasing the visibility of blue economy conflicts and impacts, measuring their causes, effects and possible solution-pathways.
- **Poor implementation of governance policies.** There is limited articulation among legal and political mechanisms, environmental and economic state-led agencies and sectors, and planning agencies at the national, regional, departmental and local levels. Thus, enforcing the separation of oceans into overlapping and contradictory jurisdictions.
- **Lack of participation of artisanal fishers in the design and implementation of public policies.** The lack of institutional arrangements and frameworks for the effective participation of traditional fishing groups in the discussion and negotiation of marine-related policies directly impacts their lives and fishing territories. The particular needs and challenges faced by traditional artisanal fishers, including those of ethnic minorities, women, individuals facing disabilities, and aging populations, remain invisibilized and excluded from the design of and implementation of public health and social welfare policies with limited protection for their working rights.
- **Absence of political representation, democratization, and collectivization of the artisanal fisheries sector at a national level.** The complexity and diversity of the artisanal fishing sector throughout the national territory—continental, marine and islands—has historically

emerged as an obstacle to the unionization and political representation of fishworkers, contributing to the invisibility of fishing communities from national political agendas.

- **Weak coastal and marine governance permeated by corruption at all levels.** Locally, some coastal communities have managed to implement spatial planning strategies, contributing to fisheries governance. However, legal and illegal interests fuel corruption across all levels, favoring national elites at the expense of marginalized fishing communities. These communities face major challenges in contesting and resisting this corruption, suffering financial hardship and violence.
- **Limited political will to recognize and safeguard fishing communities access to, use and tenure rights in coastal and marine spaces.** State institutions have historically prioritized the interests of powerful economic actors and local elites instead of working with artisanal fishing communities and ocean peoples to design coastal management policies that safeguard coastal and marine customary rights and ways of living. Historical processes of socio-economic marginalization, including informal working conditions contribute to hamper the recognition of ocean peoples' access to, use of, and tenure rights in coastal and marine spaces.
- **Incompatible approaches to marine-coastal development.** State-led agencies and private actors have largely enforced and prioritized a capitalist and extractive framing of oceans. Thus, valuing marine areas in relation to economic opportunities linked to extractive industries and biodiversity conservation. Many Afro-Colombian, Indigenous, Raizales, and other ethnic minorities and traditionally fishing groups hold plural and holistic ways of living foregrounded on the interconnection between oceans, riverine systems and society; these alternatives to development have historically been relegated to the background of State-led political agendas.
- **Absence of effective monitoring procedures and assessment of fisheries catches and value-chains.** Official fisheries statistics has historically been poorly documented and centered on economic interest areas. The limited understanding of fishing dynamics, value chains, and environmental changes hinders the assessment of the impacts of blue economy interventions on fishing communities, marine ecosystems, and

fishing resources. Moreover, obstructing the development of informed management and planning strategies.

- **Violence in marine and coastal areas.** The impacts on the artisanal fishing sector by organized crime and armed conflict are understudied. The expansion of infrastructure projects and extractive interests are often associated with increasing violence and use of illegal actors to secure local compliance and facilitate processes of dispossession. However, the impacts of emerging forms of violence and human rights violations on fishing communities, in particular women, children, the elderly and ethnic groups remain poorly understood.
- **Lack of articulation between the blue economy and climate change.** Current blue economy interventions undermine local processes of adaptation and disaster mitigation. Moreover, there are issues associated with the limited coordination among state agencies and the contradictions between national disaster risk reduction strategies and the blue economy interventions. Rampant coastal development and rapid environmental change can potentially increase the disaster risks faced by artisanal fishing communities.

Opportunities

- **Mobilization and collectivization of diverse artisanal fishing sector actors for the protection of artisanal fishing communities and coastal areas.** Strengthening and expanding the solidarity networks among artisanal fishworkers, peasant movements and other collectives representing the interests of coastal communities is needed to join efforts in resisting the impacts of rampant coastal-marine development, demand accountability, and mobilize the interests of ocean peoples at different levels of government.
- **Positioning the tenure, access to, and control of fishing resources and marine spaces as central to artisanal fishing communities' territorial struggles and marine governance.** Discussions of coastal and marine tenure and rights are gaining traction as central to resisting the intensifying impacts of capitalist interventions in coastal and marine areas. There are opportunities associated with discussing the territorial struggles of artisanal fishing communities and the role that marine

governance interventions have played in protecting or amplifying socio-environmental conflicts. Particularly, exposing the historical violence and marginalization of artisanal fishing in the context of the armed conflict in Colombia. Moreover, advocating for the protection of the use and tenure rights of fishing communities while demanding the protection of their human rights on land and at sea.

- **Demand the implementation of international guidelines and the creation of legally binding international instruments for the protection of the rights of fishing communities and the sustainability of the oceans.** For example, the implementation of the SSF Guidelines arising from a grassroots participatory effort of more than eight years.
- **Political shifts and opportunities for alternatives to economic development.** With the recent victory of elected President Gustavo Petro and the Vicepresident Francia Márquez in the 2022 Colombia's presidential elections, the country will be undertaking a dramatic historical political shift from decades of right-wing government towards a more progressive political agenda and alternatives to development, including Francia Marquez political and onto-epistemological proposition of “*vivir sabroso*”—living in peace, with dignity, solidarity, equity and with joy. A transition that is likely to open political space for reforms and initiatives that contribute to protect the rights and livelihoods of ocean peoples, including fishing communities. As well as engaging with small-scale fishing not only as a job or livelihood, but as a way of life.
- **Mobilize in defense of coastal food security and sovereignty.** Efforts to demand and protect coastal food security and sovereignty require strengthening the alliances among networks of artisanal fishworkers, peasant movements and other collectives, as well among consumers, fish-value chains, and producers; working together to secure the protection of fish and oceans for present and future generations.
- **Empowering fishing communities.** In recent decades, several fishing communities have strengthened their institutional processes for local decision-making. This has enabled them to lead the implementation of management instruments in defense of their fishing territories. For instance, leading the creation of Exclusive Zone for Artisanal Fisheries

(ZEPA), Regional Districts of Integrated Management (DRMI), and MPA in alliance with government institutions. Although many of these communities draw on these instruments to defend their territorial rights, moving beyond environmental conservation. These efforts highlight the strategic ways in which fishing communities are resisting extractive industries and securing the sustainability of their fishing practices.

Chapter 11

Panama

Co-authors: Rogério Pereira de Campos; G ssica Trevizan Pera; Lucas Milani Rodrigues; Erica Silva Mendon a; Leopoldo Cavaleri Gerhardinger.

“No, in Panama, this term [blue economy] is not being used, and I understand the term by reading some articles, some things ... but here in Panama the blue economy, the term nor the practice is going on...” (Key-informant, Panama)



Figure 15: Number of places with conflict/injustice records assessed across Panamanian coastal states (n=6 reports; n=6 places).

Introduction

This chapter analyzed 54 blue investments and nine conflicts reported in online repositories. We also assessed official information on the country’s maritime policies focusing on the relationship between the Panamanian State and small-scale fishers. The term blue economy is still recent in Panama, being inserted in 2016 and within the governmental sphere; it has apparently little diffusion across the population, especially in dialogues with local communities.

Public policies empowered by international organizations are beginning to be disseminated and include these communities, but such actions have not yet generated practical results that can be assessed in public statistics. The organization of traditional fishers in groups and federations brings new forms of representation and visibility to groups largely dispersed and opens up new channels of communication with the government, but public debates and policies are still restricted.

Panama's main challenges include limited enforcement of social and environmental legislation including marine sustainable use areas, impactful tourism operations, pollution and overexploitation of resources, and limited/unclear inclusion of small-scale fishers in ocean governance and investment policies. The growing international pressures to increase the preservation and sustainable use of the environment, as well as the certifications on products extracted from maritime areas, can offer new opportunities for small-scale fishers and added value to their products, potentially making social and environmental improvements possible. The government of Panama is responsible for the viability of this productive structure and incentives for developing small-scale fisheries and must work to improve their production chains without increasing possible associated environmental damage of commercial exploitation.

Challenges

- **Limited enforcement of sustainable use marine areas:** The legal determinations of preservation areas in Panama provided for the possibility of sustainable use of the resources, so long as they follow the management standards and tools stipulated by the Ministry of Environment. The problem exists due to the government's lack of assignment of such management tools, which precludes the activities of artisanal fishers in traditional fishing areas. Associated with this, the lack of enforcement favours the emergence of illegal groups that use these resources, penalizing the region's biome and also small-scale fishing professionals.
- **Reduced fishing areas with the presence of tourism resorts:** The expansion of tourism networks on the beaches of Panama has undergone strong growth in the last decade, in some cases traditionally occupying spaces for artisanal fishing activities. Massive investments and policies favorable to the increase in tourism have generated difficulties in the

practice of artisanal fishing, leading to a drop in class production and also a reduction in the number of fishers. Restriction and control of tourism in preservation areas is also a challenge. Conversely to what happens with artisanal fishing, tenders for tourism in preservation areas are very flexible, benefitting this area to the detriment of artisanal fishing. In several cases, there is no requirement on environmental impact research to establish maritime sports practices or build tourist infrastructure.

- **Sport fishing without the participation of artisanal fishers in the process:** Sport fishing has become an important tourist attraction in Panama, generating revenue for the government and increasing tourism. However, these practices occur in many areas of artisanal fishing and end up impacting fisheries production. Associated with this, artisanal fishers' knowledge of their area of work and fishing techniques are not included in the practice of sport fishing, where they could act as guides, technical consultants and support.
- **Laws regulating the artisanal fishing profession provide unclear consequences to small-scale fishers:** The new law that seeks to regulate the practice of fishing in various spheres comes into force this year in Panama. But no clarification on the benefits and duties for artisanal fishers is provided. While the law regulates and guarantees artisanal fishing, it does not clarify how the control, inspection and incentives will be carried out.
- **Mining and oil areas in fishing zones:** Mineral resources are present in Panama and attract investments from external countries, but without the regulation on environmental impacts or adequate inspection. As it is an isthmus, its coasts are exposed to oceans on either side. The pollution generated in the interior of the country will always reach the seas of Panama, directly impacting fishers' livelihoods.
- **Increase in the transit of ships in the Panama Canal and interference in the sea routes of fish:** After the reform of the Panama Canal in 2016, the transit of cargo ships increased five times, generating greater maritime movement and affecting the traffic of schools in the region. This increase also raises another concern: the volumes of ballast water from ships that bring contamination and microorganisms from other regions that may affect the local biome, in addition to the increase in salinization of freshwater reserves around the channel.

Opportunities

- **Collective training of artisanal fishers:** The increase in groups of artisanal fishers organized collectively is generating greater political power for these groups, in addition to visibility inside and outside Panama. Supranational entities such as the UNDP increased their investments for these collectives, aiming to consolidate organized groups of artisanal fishers, either to preserve the form of production or to assist in the indirect inspection of biomes. Sport fishing, artisanal fishing, adventure tourism, tourism in general and resorts have different legal processes to ensure their space in Panama, but with different objectives. These different groups could exercise their functions without interfering in the activities of others in the same space.
- **Possible participation of artisanal fishers' groups in laws on the use of maritime resources:** As part of Ley 131, artisanal fishers will have more space for debate with secretariats and ministries responsible for Panama's water resources, being able to give their opinion and defend their interests directly, process ineffective so far.
- **Sustainable use of resources in protected areas:** Ensured by law of the Ministry of the Environment, preservation areas can be used sustainably by traditional groups and artisanal fishers, but in these cases, it is necessary to develop the management tools for each space. Ensuring greater participation in the management of water resources, groups of local fishers will be able to pressure the government to implement the basic requirements for the functioning of these areas, protecting the space and generating work and income for the local community.
- **Participation in sport fishing as guides:** The increase in sport fishing appears as another form of income for artisanal fishers, being able to act as guides, inspectors and technical support for tourists in this area, also helping to protect biomes.
- **Mapping and inspection of fishing areas, delimiting regions for artisanal and industrial fishing:** The increase in the participation of artisanal fishers opens space for the debate on the delimitation of artisanal and industrial fishing areas, guaranteeing the production of fish for all groups. It also makes it possible to charge for greater inspection to guarantee maritime resources and their sustainable use.

Chapter 12

Costa Rica

Co-authors: Leopoldo Cavaleri Gerhardinger; Lucas Milani Rodrigues; Erica Silva Mendonça.

“.. If the [Nationalization of Small-Scale Fisheries] Guidelines Project [of new legislation] passes [in Congress], which is very important but has yet to pass, is still under debate, and we are supporting it to pass, because if it does, I feel that we are going in a good pathway for artisanal fishers.”

(Key Informant, Costa Rica)

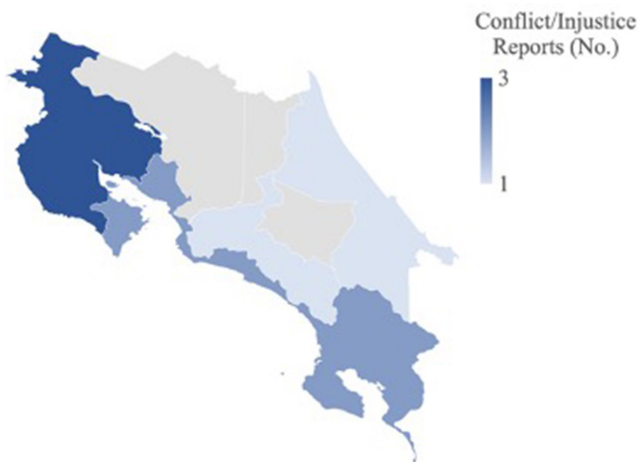


Figure 16: Number of places with conflict/injustice records assessed across Costa Rican coastal states (n=7 reports; n=7 places).

Introduction

The Costa Rican government advocates internationally for blue economy and is often praised for its range of international partners who believe in its potential to develop it. The narrative is largely based in the advancement of fisheries sustainability and economic value-chains (e.g., improving the ‘business climate’) in offshore commercial (large pelagic) and increasingly on coastal fisheries (emerging focus in small-scale fisheries). More recently

the marine renewable energy sector gained momentum in the national blue economy narrative and can become a major driver of maritime tenure conflicts and rights violations if past unjust territorial development rationale endures. Costa Rica is the one country in our study with the largest blue finance value allocated to support transformations in the fisheries sector (most prominently at the Provinces of Puntarenas and Guanacaste in the Pacific and Limon in the Caribbean). The country offers several marine governance models and subnational experiences that can potentially showcase inclusive, deliberative and integrated approaches to territorial development, including: multiple use marine areas, responsible fishing areas, and notably had the country's Exclusive Economic Zone (EEZ) divided in marine governance units with respective master plans and coastal marine committees.

However, the efficiency of these mechanisms in delivering social and environmental outcomes, and the extent they will tackle long-lasting power asymmetries and other coastal-marine governance implementation problems, is a question for attention. The country is entering a blue economy era with some exemplary pilot projects in marine spatial planning (*e.g.*, Gulf of Nicoya, South Pacific) to be used as models for EEZ-level MSP in the country's entire Pacific EEZ; but also building over a legacy of fisherfolk tenure rights violations with top-down designations of marine protected areas (*e.g.*, in the Caribbean). While the country looks at a potentially bright blue future and despite the recent progress in developing new institutional, legal, technological and financial frameworks as well as declaring voluntary international commitments to that purpose, the legacy of environmentally and socially flawed coastal development—particularly the large-scale tourism model adopted—largely challenges the current ocean governance system to deliver on sustainable and equitable blue development outcomes. The chapter outlines and assesses the country's blue economy and governance profile, also reporting on seven blue conflicts and 35 blue finance initiatives in coastal states available in online repositories. This analysis suggests five principal challenges and four opportunities for small-scale fisher's engagement with blue economy narratives in Costa Rica.

Challenges

- **Rapid and accelerating development of blue policies and investments:** How fisherfolk organizations can monitor the rapid/accelerating development of large-scale impact projects and new financial mechanisms in a context of liberal trade mindset at national and regional

levels? The country is part of numerous international agreements and thus permeable to international influence; whilst national representation of fisherfolk organizations faces severe limitations to follow-up with social control over coastal development projects from several sectors (tourism-led and marine renewable energy fields) posing severe challenges to customary land/sea tenure and preferential access, rights of women, traditional knowledge and management practices. There is a need to better understand the nature and dynamics of ‘branding/marketing of innovations’ undertaken by Costa Rican government in a blue context, particularly concerning how small-scale fishing communities are presented and represented in national and international forums. While 2021 is the Bicentennial of the Republic of Costa Rica, how SSF will be highlighted as an essential component for sustainable development raises a point of attention. Large-scale level of change and transformation can only be reasonable if matched by much higher levels of inclusion of fisherfolk and supportive organizations; and co-management structures allowing local communities to engage with monitoring and controlling responsibilities.

- **Weak implementation of statutory coastal and ocean governance frameworks:** Costa Rica has a history of innovative ocean governance attempts but has failed in important ways due to poor inter-institutional coordination at all levels (e.g., federal, municipal), and the country’s political hurdles (clientelism, prioritization of economic gains and corruption).
- **Loss of livelihoods derived from environmental degradation and climate change:** This includes marine biodiversity loss, declining mangroves, expansion of pasture, urban, port and tourism development, impacts on freshwater systems, human waste and contamination. Climate change has had its implications to productivity and distribution of targeted resources, and to damages caused by natural disasters. Climate change mitigation and adaptation measures are largely outside the reality or possibility of agency by artisanal fishing communities who depend on government institutions and policies.
- **Asymmetrical power/informational relationships in ‘blue’ arenas:** Costa Rican artisanal fishing communities are asymmetrically positioned in blue policy arenas and negotiations. Large-scale infrastructure developments have largely driven the expansion of socially inequitable coastal growth models and with severe tenure impacts. The ‘Communitarian coastal territories’ reform movement is a living proof

of the alternative visions kept alive by people that have long struggled with land and maritime tenure in Costa Rica. Socially and strategically blind (generalized) shrimp trawling ban has affected access to essential resources by some communities. There seems to be limited support, opportunity and/or capacity to implement large-scale transdisciplinary sustainability projects that integrate and deliver salient social equity and ecological outcomes.

- **Sociopolitical organization remains unfit to blue economy’s political-administrative ecology:** The high levels of informality in Costa Rican artisanal fisheries still poses enormous challenges for the implementation of public policies. They also lack proper statistics on the level of coverage of state subsidies, particularly the extent of benefits from blue ventures. The later usually widespread without critical and integrated intersectoral conversations. The right to information and the right to objection according to the Prior and Informed Consent have not been usually followed.
- **Unequal opportunities for women across the fish-value chain:** Information is still needed to determine the socio-economic profile of women working in fisheries and aquaculture across Latin America and the Caribbean, in order to identify their particular social protection needs and include them in the design of policies with a gender equality approach. However, Costa Rican fisherwomen have long demonstrated the structural gender-based inequalities across society and notably in the fisheries sector.

Opportunities

- **Major blue investments with direct fisheries implications on the pipeline:** The recent major investment by the World Bank (USD 75 million) in the project ‘Costa Rica Sustainable Fisheries Development Project’ represents the largest investment in the sector we found across all ten studied countries. Beneficiaries are approximately 15,000, mostly small-scale, fisheries-dependent households. The conversation continuously sought by FWO organizations in collaboration with CSOs focuses on projects that allow access to higher value markets for the fishery products, and actions to increase profits without increasing production and pressure on the resource base.

- **Potential case for gender-based blue investment:** Progress has been made recently in understanding and demonstrating pathways to more inclusive policies of Costa Rican women working in small-scale fisheries value-chains. New and upcoming blue investments can and should raise this experience and attitude to the fore of project implementation.
- **Novel marine protected areas frameworks can leverage transformation in livelihoods:** Responsible Fishing Areas are exemplary of the great efforts by local communities to organize themselves to sustainably manage fisheries (*e.g.*, Chira, Tárcoles, Golfo Dulce and San Juanillo). RFAs gives rights back to local communities to develop local fishing rules, tourism development and conservation within their own spatially defined MPAs, empowering communities through inclusive governance to enhance biodiversity conservation and livelihoods strategies. □ Costa Rican Multiple Use Marine Areas (AMUMs) are now also present across the EEZ, whereby diverse human activities should pursue compatibility of conservation of natural resources in an organized way combining MPAs with diverse degrees of extraction.
- **Structural national state uptake of SSF Guidelines in blue policy and investment:** In 2015, the Costa Rican government issued a Decree with guidance on the official implementation of the SSF Guidelines in Costa Rica. After many years of doubtful implementation of the decree, artisanal fishers' movements are now pledging at the country's legislative power to approve a new bill adapting the Guidelines to the Costa Rican reality. As the country takes new legal and institutional steps, an imperative direction towards an inclusionary blue economy model requires measures be taken to help and seriously advance in the regularization of thousands of Costa Ricans who rely on artisanal and subsistence fisheries but are yet not licensed. The necessary uptake of the Guidelines in blue projects will also require adequate and effective inter-institutional coordination to overcome the administrative and bureaucratic challenges hindering the search of effective solutions to fishing but also to intersectoral problems. Whether Costa Rican policy to implement the SSF Guidelines will ever rise out of the paper to critically influence blue agendas is still a story in the making. Novel social participation mechanisms will need to be forged by stakeholders involved in order to properly accommodate the diversity of local, subnational and national small-scale fisherfolk representation through various forms of social learning and communication approaches.

Chapter 13

Nicaragua

Co-authors: John Mathias Wojciechowski; Lucas Milani Rodrigues; Erica Silva. Mendonça; Leopoldo Cavaleri Gerhardinger.

“The truth is that we have a problem of lack of independence on the part of artisanal fisher’s organizations. Right now, we find that [our] organizational activity is not well regarded, because they [national government] want to control it. They want to go directly to fishing communities without taking into account an organizational structure... They are helping to destroy an entire organizational structure with more than 20 years...”

(Key Informant, Nicaragua)

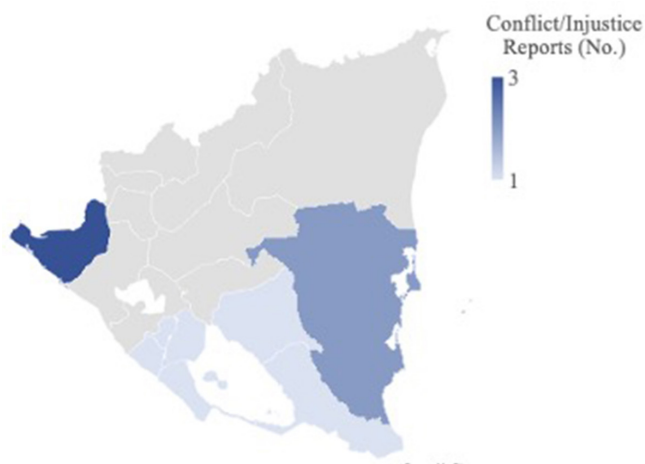


Figure 17: Number of places with conflict/injustice records assessed across Nicaraguan coastal states (n=5 reports; n=11 places).

Introduction

During the 2021-2020 period blue growth direct foreign investments in Nicaragua have totaled USD 338 million, distributed in 40 projects. Most investments in this sub-sector were designated for water and sanitation services and territorial land use development followed by the energy and agriculture sectors. The country’s blue economy strategy is not clearly defined;

however emphasis has been placed on three main investments: industrial lobster and shrimp industry, corporate aquaculture projects (mainly in the Fonseca Gulf on the Pacific) and, construction of the interoceanic canal with tremendous impacts on the indigenous autonomous territories on the Atlantic Coast. However, the reduction of international foreign investments (due to the country's political crisis) has hampered further development of the interoceanic canal. The country's political crisis has also weakened government interaction with fisher's key representative bodies further aggravating the divide between the government's populist neoliberal development politics and the aspirations of small-scale fisheries and traditional populations.

Within the fisheries sector this divide is most noticeable within the pro-corporate and pro-business aquaculture development model at the expense of mangrove biodiversity, coastal sovereignty, and coastal development. The country's main challenges to more inclusive blue growth pathways include: lack of a consistent collaborative framework between the government's INPESCA and national and sub-national representations of fisher organizations, climate change causing extreme weather phenomenon destroying coastal livelihoods and impacting fishing stocks, tenure rights disputes and conflicts between indigenous fishing communities and non-indigenous rural settlers deriving from the expansion of the agricultural frontier and centralization and vertical integration in the aquaculture value chain excluding family-based sustainable aquaculture operations. Nevertheless, some promising experiences show progress at the local level in family-based aquaculture following FAO's Environmental Approach to Aquaculture. Furthermore, FENAPESCA's strong organizational representation and new indigenous alliances at the regional level provide opportunities to overcome social inequities in blue growth development pathways.

Challenges

- **Weak implementation (decentralization) of coastal governance and management:** Nicaragua adopted the General Policy for Territorial Ordering consistent with the National Environmental law. However, despite these pronouncements, decentralization of authority over land use planning has been slow, in part due to the history of control exercised by centrally driven agencies.
- **Limited organizational capacity and social representation of small-scale fishers in blue economy initiatives:** Lack of a consistent

collaborative framework between INPESCA and the national and sub-national representations of fisher organizations, weakens the sector's ability to interact with the complex challenges set by the blue economy.

- **Heavy burdens over small-scale fishers derived from climate change and associated extreme events like hurricanes:** Decimating artisanal fisheries and reducing drastically the available stocks of aquatic resources in the region. Shrimp and lobster fisheries on the Caribbean coast on Nicaragua were the hardest hit by climate change and industrial practices.
- **Consolidation and vertical integration of the aquaculture sector along the Gulf of Fonseca:** Little room exists for family-based sustainable aquaculture, contributing to lagoon and mangrove degradation and gradual privatization.
- **Tenure rights disputes and conflicts between indigenous fishing communities and non-indigenous rural settlers on the Caribbean coast:** Due to the expansion of the agricultural frontier (mainly palm oil plantations) causing deforestation and loss of coastal habitat.

Opportunities

- **Inclusive transnational governance of lobster fisheries.** Through OSPESCA, Nicaragua is a signatory of a regional ocean governance cooperation initiative regarding lobster fisheries, one of the country's most important commercial catch species.
- **Evidence of the implementation of FAO's Environmental Approach to Aquaculture.** This has happened in Nicaragua's Estero Real mangrove ecosystem to curb the negative effects on the environment and reduce the spatial conflicts that have derived from the activity.
- **Multidimensionality of the legal framework which values sustainable coastal development and traditional livelihoods.** Based on the Articles 89-91 of the Constitution, the Statute of Autonomy of the Atlantic Coast (1987) and the Communal Land Law (2003) and the Coastal Law of 2009, the framework provides for the rights of indigenous people to own and use communal lands and waters and forests based on their traditional and customary patterns. Furthermore, the framework regulates environmental protection, public access rights, commercial activity, and property rights along the shoreline of any water body in Nicaragua.

- **Strengthening indigenous and artisanal fishers' representation in regional ocean governance frameworks.** This has happened through several bodies. They include: the National Federation of Artisanal Fishers (FENAPESCA) and the Central American Confederation of Artisanal Fishers (CONFEPESCA). FENAPESCA has strong representation at the national and regional level among fishing communities. In 2018, indigenous peoples of Costa Rica, Belize, El Salvador, Guatemala, Honduras, Panama, and Nicaragua have formed a regional alliance to strengthen indigenous representation in ocean and fisheries governance discourse. This movement created the first Network of Small-Scale Fishers of the Indigenous Peoples of Central America.

Chapter 14

Honduras

Co-authors: John Mathias Wojciechowski; Lucas Milani Rodrigues; Erica Silva. Mendonça; Leopoldo Cavaleri Gerhardinger

“For many fishers, this is something complex [the blue economy]... they are big transnationals [social actors], they are dedicated to industrial fisheries, big companies through the financial systems, they are trying to get as much as possible covering the entire territory... and they have been openly benefited from this pandemic, when all the [fishing] leaders are locked... but we are not silenced, we have our mouths open, only using other methods, but here we will always be ... speaking of the blue economy, speaking in Spanish, about the privatization of the oceans and their resources”

(Key informant, Honduras)



Figure 18: Number of places with conflict/injustice records assessed across Honduran coastal states (n=4 reports; n=5 places).

Introduction

Out of 629 development projects financed by international investors during the period 2012-2020, 44 were classified as coastal marine blue investments. However, of these, only two were directly oriented at fisheries and marine protected areas, accounting for US \$8.5 million (GEF \$3.0 million and IDB \$5.5 million), representing just over 1.01 percent of the total investment

during the period. In general, the national Honduras government sees the blue economy as a clever twist to seek higher economic and social value from marine resources for coastal communities including fisheries. However, the development model mainly favours corporate players, especially in the shrimp farming sector (in the Gulf of Fonseca) and industrial fisheries (in the Caribbean) with devastating effects on the mangrove ecosystems, fish stocks and fisher livelihoods. Additionally, lack of water and sewage treatment, urban sprawl and intensive agriculture further aggravate the sustainability of coastal communities. These vectors directly impact the Mesoamerican Reef (MAR). In Honduras, the MAR is an important source of income for SSF and coastal tourism. Today 38 percent of its total coverage is in critical condition. Both at the regional and national level progress has been made to protect sensitive marine areas but often these mechanisms are geared at institutional players and rarely include fisher organizations in the decision-making process. Furthermore, the lack of an integrated coastal management legal framework was identified as a key bottleneck in the management of marine-coastal protected areas. The main challenges for SSF participation include: the lack of information of fisheries' contribution to the Honduran economy, loss of mangrove and estuarine habitat due to expansive shrimp farming and urban sprawl, relatively small investment in SSF and marine protected areas, land-use conflicts with agricultural uses such as palm oil plantations, and loss of livelihoods of traditional populations. The opportunities for SSF to capitalize on the blue economy include school feeding programmes, organic family-based aquaculture, and recent attempts to build network of coastal municipalities to sustain fisher and tourism communities. Finally, the IDB and GEF funded international projects have leveraged local fisher knowhow to coastal management providing fertile grounds to build more robust and participatory governance mechanisms in the future.

Challenges

- **Endemic lack of data on fisheries value chains.** This is true both in terms of GDP and labour market, significantly hampering the ability of representative bodies to advocate for the sector.
- **The lack of a robust and integrated coastal management system.** This has placed fisher communities in the centre of tenure disputes over access rights and depletion of fish stock in certain areas of the Atlantic and island zones.

- **Poorly designed hydroelectric dams causing imbalances in the coastal zone.** Changes in coastal sediment deposits generating erosion, exacerbating the impacts of climate change on beaches, mangroves, other associated natural systems and on the coastal infrastructure as it happens in the city of La Ceiba. Inland fisheries have limited political representation and are not included in the design and development of large-scale projects. Furthermore, an estimated 66.9 percent of freshwater fish species are affected in their longitudinal migration due to the barriers created by the dams, significantly impacting SSF livelihoods.
- **Vertical integration of the shrimp farming operations.** This significantly reduces access and participation of small-scale and family-based operations in the sector. The corporate expansion of the shrimp farms in the Gulf of Fonseca had significant impact on loss of mangrove coverage and estuarine habitat putting at risk fisher livelihoods. The expansion of the agricultural frontier with African palm plantations further jeopardizes traditional fisher and indigenous communities, especially on the Caribbean coast.
- **Coastal pollution affecting Mesoamerican Reef:** The Ulua river basin in Honduras contributes with the highest amount of sediment, nitrogen and phosphorus with serious consequences to the fragile coral habitat. Further aggravating the water quality in the Mesoamerican Reef is the sewage from the highly urbanized tourism islands of Roatan and Utila. As much as 80 percent of this is directly discharged into the ocean.

Opportunities

- **Potential leverage of local ecological knowledge in coastal management:** IDB and GEF funded international projects have leveraged local fishers' knowhow to coastal management, providing fertile grounds to build more robust and participatory governance mechanisms in the future.
- **The inclusion of fish products in the school feeding program.** This is operational in Honduras in the initial pilot stage. However, the results are promising for income generation, food security and social inclusion, especially in vulnerable communities.

- **Participation of fisherfolk in coastal governance.** The formation of a network of coastal municipalities by the Association of Honduran Municipalities (AMHON) with other national and international partners is an important step in the direction of consolidating a more robust coastal governance framework integrating SSF and tourism strategies within a wider framework for sustainable coastal development.

Chapter 15

Guatemala

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“We are supporting a bill for a marine-coastal area here in Las Lisas. Political and economic power always comes and goes against the communities. So we have seen with good eyes a possibility of being able to declare an area as a protected area where we have the majority of mangroves, we also have an area in the sea that will prohibit trawling fisheries, only artisanal fishers.”

(Key informant, Guatemala)

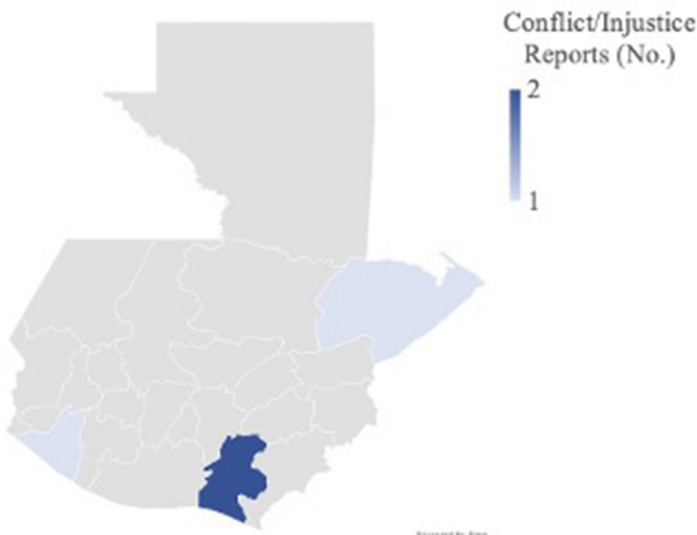


Figure 19: Number of places with conflict/injustice records assessed across Guatemalan coastal states (n=4 reports; n=4 places).

Abstract

From 2012 to 2020, 566 development projects were financed in Guatemala through international and multilateral financial agencies, accounting for

approximately US \$4.2 billion in direct foreign investment. Out of this total, 29 projects were implemented to support blue economy development. During the same period only one project was directly aimed at coastal and marine development, with an allocated budget of US \$ 5.3 million. Implemented by GEF, the project's aim was to promote the conservation and long-term sustainable use of marine and coastal biodiversity of global importance through effectively and equitably managed marine-coastal protected areas (MPA).

At the national scale, Guatemala does not have an established/consolidated blue economy framework. However, the analysis shows that progress has been made through international governance cooperation and, at the national level, through the integration of sustainable in-land development strategies, mainly with regards to water treatment and sanitation. Terrestrial territorial development dynamics have been privileged over marine-based activities in terms of foreign investment and policy framework. Reducing coastal and ocean pollution through an integrated watershed development process represents Guatemala's most important progress towards a more comprehensive blue economy framework. Nevertheless, our reading suggests that Guatemala's lack of institutional capacity in coordinating participatory and comprehensive coastal development processes significantly hampered the country's efforts to secure coastal livelihoods.

The lack of a strong institutional framework thwarts ocean conservation efforts, especially of the coral reef ecosystem on the Atlantic Coast. In addition, the participation of small-scale fisheries in the blue economy is hampered due to internal sector-specific conflicts. On the Atlantic coast, sustainability of traditional fisher communities is placed at risk from destructive fisheries that use indiscriminate fishing techniques, reducing the stocks of many important local fish species of interest. On the Pacific coast SSF are most impacted by expansive shrimp farming, damaging the country's main mangrove system, and by intensive sport fishing, reducing some of the most valuable fish resources. Nevertheless, recent long-term projects designed to implement MPAs are showing positive signs of collaborative governance and species conservation. The implementation of the Las Lisas MPA and of conservation fishing zones shows that sustainable coastal development is possible with economic growth and community participation.

Challenges

- **Severe lack of institutional capacity to implement inclusive policies.** Shortcomings of the central government’s Fisheries Department in the Ministry of Agriculture to implement fisheries policies and development frameworks with the participation of sub-national stakeholders and community partners.
- **Lack of comprehensive inland and coastal development watershed conservation programmes.** These could reduce urban pollution run-off and prevent further coral reef loss.
- **Small-scale fishers’ conflicts with other fisheries segments.** This includes shrimp farming and sport fishing (on the Pacific coast) and industrial fishing (on the Atlantic coast).

Opportunities

- **Strengthen participation.** Guatemala’s central government agencies and SSF sector representatives need more collaboration in multilateral and international marine governance efforts including to OSPESCA, and conservation initiatives of the Mesoamerican Reef, among others.
- **Integration of coastal development strategies with MPAs.** This will account for social participation of national, sub-national and community stakeholders, including fishing communities and other representatives of the fisheries sector.
- **Long-term capacity building.** Such strategies need to be implemented with local universities and research centers to build a critical mass of local professionals and community leaders to deal with complex coastal governance and marine preservation strategies.
- **Design and implementation of local participatory bodies.** This will include committees and councils to strengthen community engagement in the development of sustainable SSF strategies.

Section IV
Recommendations for action

Chapter 16

Critical challenges and opportunities posed by the blue economy paradigm to Latin American small-scale fisheries

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Our preliminary country-based assessment of the interaction between sectoral blue economy investments and conflicts/injustices rendered 51 critical challenges and 42 critical opportunities (Figures 20 and 21). While in most countries SSF struggles spans across all the major critical challenges categories, the analysis indicated the most frequent in Latin American are associated with ‘inequitable distribution of economic benefits’, ‘social and cultural impacts of ocean development’, ‘exclusion from decision-making and governance’, and ‘environmental degradation and reduction of ecosystem services’.

Likewise, the most critical opportunities for SSF that should be advanced in Latin American ocean development agendas are to ‘develop policies and mechanisms to foster and ensure the equitable distribution of economic benefits’ and ‘develop inclusive and participatory planning and governance processes for ocean development’.

Tables II and III summarize the context of critical ocean economy challenges and opportunities facing SSF in each country and should be seen as preliminary assessments to be used as discussion points in follow-up discussions with fishworkers organization’s leaders and civil society supporters across studied countries.

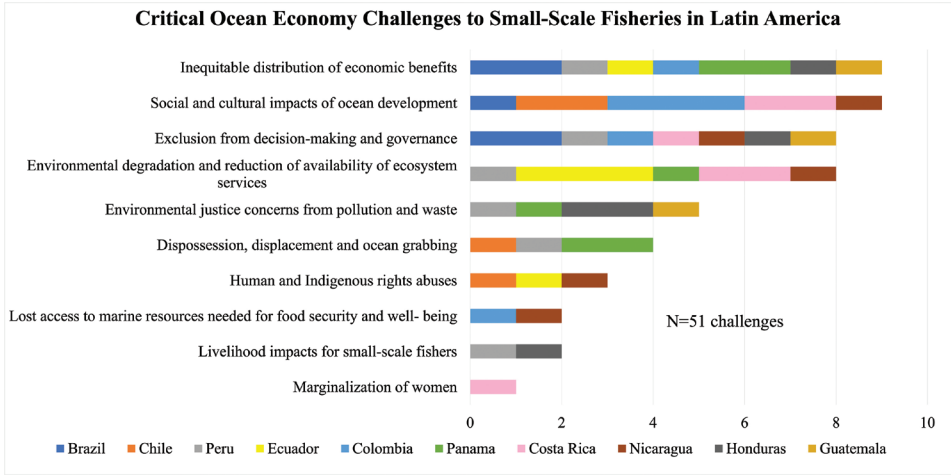


Figure 20: Geographic distribution of 51 critical blue economy challenges to small-scale fisheries in Latin America identified in this study.

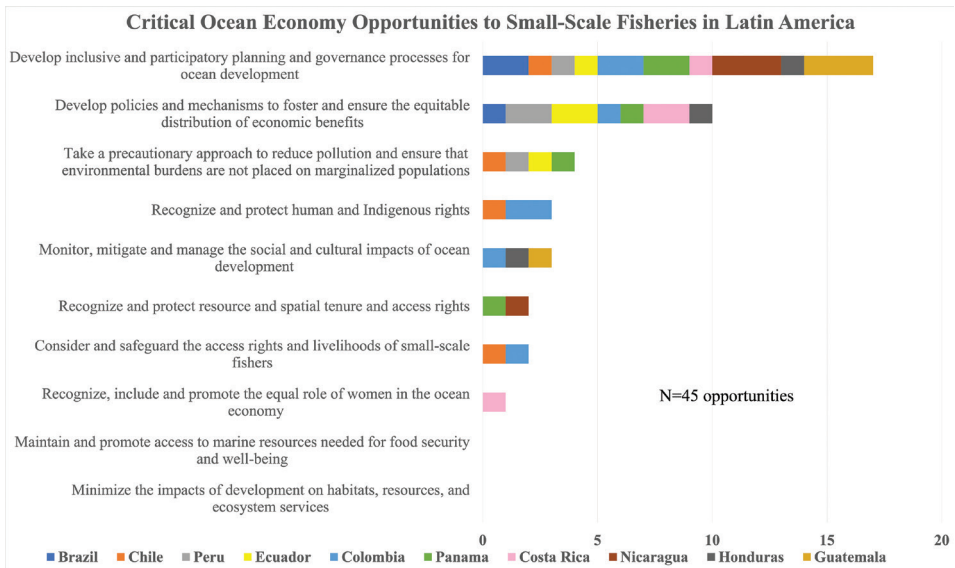


Figure 21: Geographic distribution of 42 critical ocean economy opportunities to small-scale fisheries in Latin America identified in this study.

Table II: Critical blue economy challenges to small-scale fisheries (SSF) identified across ten assessed Latin American countries (Brazil, Chile, Peru, Ecuador, Colombia, Panama, Costa Rica, Nicaragua, Honduras and Guatemala).

Critical Blue Economy Challenges to Small-Scale Fisheries	
Dispossession, displacement and ocean grabbing	<ul style="list-style-type: none"> • Confront ocean grabbing (Chile) • Governmental actions unfavorable to SSF (Peru) • Ocean grabbing by tourism resorts, mining and oil exploitation (Peru)
Environmental justice concerns from pollution and waste	<ul style="list-style-type: none"> • Rapid economic and demographic growth, concentrated on the coast without adequate coastal management (Peru) • Increased pollution and changes in the distribution of fish due to coastal development and high traffic of ships (Panama) • Poorly designed hydroelectric dams causing imbalances in the coastal zone and coastal pollution affecting the Mesoamerican Reef (Honduras) • Lack of comprehensive inland and coastal development watershed conservation programs to reduce urban pollution runoff and prevent further coral reef loss (Guatemala)
Environmental degradation and reduction of availability of ecosystem services	<ul style="list-style-type: none"> • Overlapping and/or absent multisectoral approaches in planning lacks socioeconomic consideration and require legal reforms (Peru) • Loss of biodiversity due to environmental degradation, vulnerability of the marine environment to climate change and pressure on fish stocks by international fleets (Ecuador) • Limited enforcement of sustainable use marine areas and reduction of fish stocks by overexploitation (Panama) • Weak implementation of statutory coastal and ocean governance frameworks and loss of livelihoods derived from resulting environmental degradation and climate change (Costa Rica) • Heavy burdens over small-scale fishers derived from climate change and associated extreme phenomenon (hurricanes) (Nicaragua)
Livelihood impacts for small-scale fishers	<ul style="list-style-type: none"> • Governmental actions devalues SSF (Peru) • Lack of a robust and integrated coastal management system has placed fisher communities in the center of tenure disputes over access rights and depletion of fish stock (Honduras)

<p>Lost access to marine resources needed for food security and well-being</p>	<ul style="list-style-type: none"> • Ignorance of rights related to access, use and possession of marine-coastal resources and informal employment in the sector (Colombia) • Consolidation and vertical integration of the aquaculture sector on the pacific coast - mainly in the Gulf of Fonseca (Nicaragua)
<p>Inequitable distribution of economic benefits</p>	<ul style="list-style-type: none"> • Lack of international investments that prioritizes small-scale fisheries and low political credibility of a socially and environmentally sustainable blue economy discourse (Brazil) • Fragility in the valuation of the artisanal fishing value chain and difficulties in Food Safety Certifications (Peru) • Reconcile policies to encourage economic growth with the constitutional principles of Buen Vivir (Ecuador) • Incompatible and exclusionary visions of marine-coastal development (Colombia) • Poor direct investments in SSF, unclear consequences of recent fisheries legislation reforms, and impediments to enter the sport fishing sector (Panama) • Vertical integration of the shrimp farming operations significantly reducing access and participation of small-scale and family-based operations in the sector (Honduras) • Small-scale fishers conflicts with other segments of the fisheries sector including shrimp farming and sport fishing (on the pacific coast) and industrial fishing (on the Atlantic coast) (Guatemala)
<p>Social and cultural impacts of ocean development</p>	<ul style="list-style-type: none"> • Blue economy initiatives promoting environmental injustice (Brazil) • Need to encourage SSF and indigenous people's alliances and support for multi-stakeholder networks (Chile) • Lack of national-level representation of SSF promotes their invisibility, corruption in governance and violence in coastal areas, and unfitness of blue projects to the complexity of social-ecological dynamics in climate change adaptation and disaster mitigation (Colombia) • Rapid and accelerating development of 'blue' policies and investments, and unfit sociopolitical organization of SSF towards 'blue economy's' political-administrative ecology (Costa Rica) • Limited organizational capacity and social representation of small-scale fishers in blue economy initiatives (Nicaragua)
<p>Marginalization of women</p>	<ul style="list-style-type: none"> • Unequal opportunities for women across the fish-value chain (Costa Rica)

Human and Indigenous rights abuses	<ul style="list-style-type: none"> • Limited media coverage of injustices towards SSF (Chile) • Low adherence and knowledge of traditional fishing communities to the principles of the blue economy (Ecuador) • Tenure rights disputes and conflicts between indigenous fishing communities and non-indigenous rural settlers (Nicaragua)
Exclusion from decision-making and governance	<ul style="list-style-type: none"> • Blue economy agendas disregarding SSF communities and dismantling of democratic structures for fisherfolk participation in decision-making (Brazil) • Coastal management model without effective community participation (Peru) • The lack of implementation of governance and participation policies (Colombia) • Limited dialogue between government and artisanal fishers (Panama) • Asymmetrical power/informational relationships in ‘blue’ arenas (Costa Rica) • Weak implementation of decentralized coastal governance and management frameworks (Nicaragua) • Structural lack of data on fisheries value chains and their contribution to the national economy (Honduras) • Severe lack of institutional capacity to implement inclusive policies (Guatemala)

Table III: Critical blue economy opportunities to small-scale fisheries (SSF) identified across ten assessed Latin American countries (Brazil, Chile, Peru, Ecuador, Colombia, Panama, Costa Rica, Nicaragua, Honduras and Guatemala).

Critical Ocean Economy Opportunities to Small-Scale Fisheries	
Recognize and protect resource and spatial tenure and access rights	<ul style="list-style-type: none"> • Mapping and securing co-existence of SSF areas against industrial fisheries and tourism (Panama) • Promising evidence from the implementation of FAO’s Environmental Approach to Aquaculture (Nicaragua)
Take a precautionary approach to reduce pollution and ensure that environmental burdens are not placed on marginalized populations	<ul style="list-style-type: none"> • Supporting climate change adaptation and transformation initiatives (Chile) • Implementing public policies to protect fragile ecosystems while supporting local communities (Peru) • Strategically implementing a representative system of marine and coastal protected (Ecuador) • Promoting sustainable use of resources inside marine protected areas (Panama)

<p>Minimize the impacts of development on habitats, resources, and ecosystem services</p>	
<p>Consider and safeguard the access rights and livelihoods of small- scale fishers</p>	<ul style="list-style-type: none"> • Supporting SSF Economies (Chile) • Protecting the food sovereignty of fishing communities creating alliances for the protection of the ocean as a social and cultural space (Colombia)
<p>Maintain and promote access to marine resources needed for food security and well-being</p>	
<p>Develop policies and mechanisms to foster and ensure the equitable distribution of economic benefits</p>	<ul style="list-style-type: none"> • Investing in small-scale fisheries public support projects and policies (Brazil) • Reforming fisheries management systems, focusing on the inclusion of SSF value chains in local and territorial development processes (Peru) • Building upon the constitutional principles of Buen Vivir and the country’s long-term marine governance experience (Ecuador) • Demanding the implementation and creation of international instruments and agreements that protect artisanal fishing, the rights of fishing communities and the sustainability of the oceans (Colombia) • Ensuring the recently legally acknowledged rights of artisanal fishers are adopted, and that they are able to partake in sport fisheries and establish international partnership in the protection of the marine environment (Panama) • Securing that major ‘blue’ investments with direct fisheries implications on the pipeline truly enables structural national state uptake of SSF Guidelines in ocean policies (Costa Rica) • Advancing the inclusion of fish products in school feeding programs (Honduras)
<p>Monitor, mitigate and manage the social and cultural impacts of ocean development</p>	<ul style="list-style-type: none"> • Linking with solidarity efforts to resist and counteract the impacts of rampant development (Colombia) • Leveraging of local ecological knowledge in coastal management as outcomes of international projects (Honduras) • Integrating coastal development strategies with marine protected areas while securing social participation (Guatemala)

Recognize, include and promote the equal role of women in the ocean economy	<ul style="list-style-type: none"> • Demonstrating best practices of gender-based blue investment (Costa Rica)
Recognize and protect human and Indigenous rights	<ul style="list-style-type: none"> • Facing conflicts and injustices (Chile) • Providing visibility of the historical violence and marginalization of SSF in the context of armed conflicts and uniting local with international struggles (Colombia)
Develop inclusive and participatory planning and governance processes for ocean development	<ul style="list-style-type: none"> • Promoting inclusive governance of the ocean through developing fisherfolk learning networks (Brazil) • Enhancing inclusive marine governance (Chile) • Creating and implementing a National Policy for Integrated Coastal Zone Management (ICZM) that truly values and includes SSF (Peru) • Supporting the artisanal fishing sector's political power based on the economic importance of their productive chains (Ecuador) • Supporting the integration between SSF actors in order to enable their protection of coastal environments and advocacy over territorial struggles (tenure, access and control, overfishing) (Colombia) • Supporting mutual capacity building of SSF organizations (associations and cooperatives) to strengthen advocacy towards their inclusion in marine policy-making (Panama) • Advancing implementation of novel marine protected areas frameworks that can leverage transformation in the livelihoods of SSF (Costa Rica) • Advancing SSF inclusion in transnational ocean governance (e.g, lobster fisheries) and appropriate implementation of the country's multidimensional legal frameworks valuing sustainable coastal development and traditional livelihoods (Nicaragua) • Enabling fisherfolk participation in the recently designated network of coastal municipalities in order to include them in coastal governance processes (Honduras) • Strengthening participation of government agencies and SSF organizations in multilateral and international marine governance efforts, integrating SSF in coastal development strategies with marine protected areas, and creating new participatory platforms (Guatemala)

Chapter 17

Next steps

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Following-up with critical analysis of the scope and implementation of all identified blue initiatives will be a dauntingly complex task, requiring technical and political coordination by fishworkers organizations and their supporters. That is probably best addressed through regional (Latin American) peer-to-peer learning networks,¹ resonating with and building upon recent attempts by FWOs to create and strengthen such regional networks.

Therefore, the results presented in this study should be discussed with fishworkers organizations, as an important next step that may leverage and strengthen their mutually supportive regional engagement through knowledge-exchange and advocacy-oriented dialogues.

The proposed series of inter-network national and regional dialogues can serve as a legitimate basis to leverage collaborative efforts to record and map additional social-environmental conflicts/injustices involving SSF. Such efforts should prioritize areas where internationally accessible information is lacking on the struggles facing small-scale fishers in the context of ‘blue’ or ‘green’ development agendas.

In practice, both agendas are interlinked. Hence efforts should be made to expand the scope of this assessment to encompass investments and the social struggles of in-land freshwater indigenous and small-scale fishery systems, as well to seek to engage FWOs representing them with national and international social learning processes referred herein.

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- 1 See: ‘Marine-Related Learning Networks: Shifting the Paradigm Toward Collaborative Ocean Governance’ <https://www.frontiersin.org/articles/10.3389/fmars.2020.595054/full>

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Annexures

Annex I

Blue Economy questionnaire for friends of small-scale fisheries[^]:

1. How do you understand the term 'Blue Economy' (variously referred to as Economy or Growth)?
2. Are you aware of any studies by your government or research institutions of the maritime* sectors in your country and their socio-economic indicators: such as employment by sector; contribution to the national economy; contribution to human development?
3. What Blue Economy projects / plans have been proposed or are ongoing in your country or region since 2012**?
4. Who are the actors involved in these projects – national / subnational governments, private sector, and donor agencies?
5. What sectors are included in your government's / multilateral donor agency's Blue Economy policy / project? Are fisheries and fishing communities included?
6. What real and potential impacts do these projects have on the lives and livelihoods of fishing communities?
7. Which sectors of the economy have had the greatest interaction / competition / impact on fishing communities (marine and inland) in your country / region?
8. What legal protections do fishing communities enjoy – recognition of fishing rights; coastal land settlements; indigenous people's rights – with regards to competition with other maritime industries? (Mention international and national legal instruments; court judgments, etc.)
9. What are the challenges in recognizing and protecting the rights of fishing communities to coastal and marine resources, and their contributions to food security, livelihoods, cultures and the economy?
10. What reactions have fishing communities and their organizations had to blue economy projects in your country or region?
11. How should fishing communities and their supporters respond to:
 - Increasing coastal and maritime development and industrialization
 - Blue Economy policy formulations by governments and donor agencies

[^] Participants can choose to share the requested information anonymously. All information will be confidential and will serve the development of the workshop concept note and programme.

* Maritime industries in Blue Economy formulations consist of all or some of these: fisheries, aquaculture, shipping and ports, tourism, extractive industries, renewable energy, environmental conservation and biotechnology.

** The 2012 cut-off date was chosen because the concept of 'Blue Economy' begins to be used in international processes at this time. If projects initiated prior to this date are described as Blue Economy projects now, please include them.

Annex II

Classification of major blue economy sectors and respective descriptors/topics included in the coding and analysis of ‘blue’ investments and reported conflicts/injustices in Latin American countries’ coastal states.

Blue Economy Sector	Blue Investments Descriptors/ Topics Included	Blue Conflicts/Injustices Descriptors/Topics Included
Fisheries & Aquaculture	Aquaculture; fisheries development and management; sustainable use of coastal-marine biodiversity.	Fisheries industry and resources; aquaculture; mariculture activities; predatory fishing; shipbuilding; shrimp farming.
Mining	Extractive mining operations (hydrocarbons and metals)	Exploration of mining deposits; mining and steel; mining; metal refineries; mineral processing.
Energy matrix	Energy efficiency; biogas; solar energy; hydroelectricity; geothermal energy; energy consumption; power infrastructure; renewable energy; biofuels; lighting; renewable energy.	Coal mining and processing; Chemical and petrochemical industry; Oil industry; Gas burning; Dams and hydroelectric plants; Wind farm mills; Oil and gas – exploration; Oil and gas exploration and extraction; Oil and gas – refining; Oil and gas refinery; Oil and gas – Transport; Thermal power plants; Thermoelectric; Uranium mining; Wind energy.
Agriculture & Livestock	Agroforestry systems; silvopastoral systems; rural credit and low-carbon agriculture; agriculture solutions; agro-industry; eco-efficient agro-industrial processing models; small-scale and indigenous farming; best practices in agriculture; livestock fiber (e.g., Alpacas); agricultural innovation; agriculture development impact; agriculture irrigation and drainage; agriculture technologies; food systems and land use restoration; agro-ecology.	Not considered.

<p>Environmental Resource Management & Conservation</p>	<p>Conservation goals; recovery and protection of ecosystem services; climate change; eradication of hydro chlorofluorocarbons; low carbon development; natural disaster risk and climate change vulnerability; integrated transboundary management of the Mesoamerican reef; integrated water resources management; mangrove conservation; reduction of marine plastics; marine ecosystem; management in watershed; land degradation; global wildlife; forest conservation in coastal states; environmental strategic planning; climate resiliency; integrated water and wastewater management and security; sustainable landscapes; transboundary management of aquifers and river basins; sanitation.</p>	<p>Climate change; Implementation of protected areas; Desalination; Logging and extraction of wood; Management of wetlands and coastal zones; National parks / reserves; REDD / CDM; Water treatment and sanitation (access to sewer system)</p>
<p>Tourism</p>	<p>Tourism development, innovation and productive chains; community-based and indigenous tourism innovations; scientific tourism; low-impact ecotourism; labor market skills in tourism; nature-based tourism; geotourism.</p>	<p>Tourist facilities (ski centers, hotels, marinas); Tourism industry; Tourism developments</p>
<p>Coastal State Development & Territorial Use/ Occupation</p>	<p>Revitalization of historic centers; water stress; transport and mobility; solid waste, water and sanitation, urban inequality and land use, and tax and financial autonomy; Improving the quality of life of the population; sustainable development of vulnerable neighborhoods; restoration of road infrastructure and basic water supply services; supporting civil society and community-based initiatives; water and sanitation; competitiveness of productive chains; sustainable cities.</p>	<p>Access to water rights; agribusiness; death threat; agrofuel and biomass plant; construction; environmental degradation; conflicts over the privatization of waste and problems of access to garbage collectors; landfills; incinerators; dumps and recycling plants; eviction; access restriction; conflicts over urban development; livestock real estate speculation; deforestation; monocultures; garbage dumps, toxic waste treatment, landfills; pesticides; intensive food production (monoculture and livestock); real estate speculation; land tenure disputes; timber companies; pesticides; plantation conflicts.</p>

Transport, Infrastructure & Logistics	Urban mobility; navigation; shipping; ports; modernization and expansion of productive infrastructure; transportation and urban logistics; low emissions transport; development of territorial connectivity; logistics efficiency; roads; road network integration; electric mobility; road transport.	Port and airport projects; Waterways, highways, railways, port complexes / terminals and airports Transportation contamination (spills, emissions, dust); Navigation and cabotage; Transportation infrastructure (roads, routes, canals, waterways, pipelines); Pipelines, oil and gas pipelines; Shipyards
Other Industries	Sustainable industrial zone development; industrial energy efficiency; renewable biomass-based industry; market for energy efficient lighting, air conditioners and refrigerators; financial sustainability and competitiveness; solar and energy efficiency in industrial sector.	Chemical industries; Manufacturing activities.
Public Sector and Public Policies	Not considered.	Performance of government entities; Privatization of public lands; Performance of the Judiciary and / or the Public Ministry; Public policies and environmental legislation.

Footnotes

- 1 <http://www.mspglobal2030.org/msp-global/pilot-project-southeast-pacific/>
- 2 <http://www.fao.org/blogs/blue-growth-blog/coastal-fisheries-on-the-agenda-in-guayaquil-ecuador/en/>
- 3 <http://www.fao.org/blogs/blue-growth-blog/helping-to-reduce-bycatch-in-latin-america-and-the-caribbean/en/>
- 4 <http://www.fao.org/in-action/fish-4-acp/en/>

The incessant noise over ‘Blue Economy’ and ‘Blue Growth’ leaves artisanal and small-scale fishers dazed and confused. This report works through that confusion. It draws on scholarship from the trenches and the research centres across ten Latin American countries. From extensive interviews, policy reviews, analyses of finances and online datasets. In granular detail, it examines how Blue Growth affects artisanal fishers and their need for equity and justice. Through the baffling shades of blue—conflicts, priorities, the politics of managing our coasts and seas—this report finds clear light. It lays down the agenda for fishworkers and organizations working for them.

ICSF (www.icsf.net) is an international NGO working on issues that concern fishworkers the world over. It is in status with the Economic and Social Council of the UN and is on ILO’s special list of Non-Governmental Organizations. It also has Liaison status with the FAO.



International Collective in Support of Fishworkers

www.icsf.net

Isla de Malpelo (COLOMBIA)

Scale 1: 12,500,000

Robert Conformal Conic Projection, standard parallels 7°N and 24°N

100 200 300 Kilometers
100 200 300 Miles

any representation is not necessarily authoritative.