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Blue Foods for Indonesia: A Human & Planetary Health Action Lab

Conflict and Coastal Resources:

Lessons Learned from Conflict Resolution Strategies across Global Fisheries

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Contents

Executive Summary

This report focuses on themes of **conflict** over coastal resources and fisheries. We develop strategies for conflict mediation from case studies around the world, with a focus on resolution approaches that prioritize small-scale fishers. Coastal resources conflict is a growing issue in blue foods, as more actors enter the sector with varying interests, objectives, and socioeconomic influence. We synthesize key themes for mitigating, managing, and resolving fisheries conflict, recognizing their impact on blue foods' accessibility and role as a socioeconomic pillar. While conflicts take many forms in Indonesia and beyond – from violent altercations to social tensions – several patterns and trends emerge in conflict dynamics.

We present **three key themes** identified by researchers regarding fisheries conflicts in Indonesia: (1) **coastal use conflict**, (2) **inequities in resource allocation**, and (3) **resource competition**. We then outline **six strategies** derived from global case studies where these themes were evident, including fisheries in the Arabian Sea, Nova Scotia (Canada), South Africa, the Colombian Pacific, and West Africa. By examining coastal resource conflicts in these regions and conducting expert interviews on both successful and unsuccessful conflict resolution, we develop strategies – ranging from upstream approaches to mitigate potential conflict triggers to downstream tactics – for improving conflict resolution. This report aims to serve as an informative resource outlining various approaches to reduce conflict in blue foods sectors and promote a more sustainable, peaceful blue foods economy.

1. Introduction

Background: Coastal Resources Conflict Overview

This report investigates strategies for conflict resolution and remediation to foster equitable interactions across blue food harvest sectors in Indonesia. We focus specifically on conflicts involving small-scale fishers, who comprise the majority of Indonesia's blue food stakeholders.

Conflict is inherent in all social processes, particularly when groups with differing goals, interests, and social positions share the same spaces. As the blue food sector expands, coastal resources have become critical points of global conflict. These resources attract diverse groups targeting the same assets but representing vastly different social backgrounds, power levels, and wealth. Such convergence almost inevitably leads to conflict.

The appearances and outcomes of conflict take many forms. In Indonesia's 17,508 islands, the types of conflict are as diverse as the people involved in the blue foods sector. Conflicts occur both *vertically*, between actors and more powerful organizations or individuals, and *horizontally*, as actors interact with their peers. These conflicts can manifest as vehicle collisions, vessel takeovers, subtle social resentments, or economic hardships, posing significant barriers to sustainable and equitable blue foods interactions. Power differentials often exacerbate these conflicts, further marginalizing historically disenfranchised groups such as small-scale fishers.

In this report, we examine **three key axes of blue foods conflict** recurring in the Indonesian context, offering six strategies for conflict resolution that are drawn from five global case studies. We order conflict resolution strategies from **upstream** to **downstream**, from reducing conflict triggers before they occur, to minimizing the extent of conflict as it happens, to developing effective remediation once conflicts cease.

Firstly, small-scale fishers often clash with **other coastal users** who share the same space but operate with different goals. Secondly, **government policies** frequently misalign with and overlook the needs of small-scale fishers. Lastly, small-scale fishers frequently conflict with **industrial fishers,** who target similar resources but possess vastly different technology and economic power.

Small-scale fishers and other coastal users

Coastal space is in high demand in Indonesia, as it is worldwide. Coastal ecosystems offer a variety of benefits – such as aesthetic value, economic opportunities, and development potential – that attract diverse actors alongside small-scale fishers. Although these actors overlap spatially, their goals and interests are often misaligned, leading to frequent conflicts. The nature of these conflicts varies based on the coastal use cases present in the country. Common trends include conflicts between tourism and small-scale fishers, as seen in Lombok, where foreign tourism

shifts power away from local communities.[1] Additionally, industrial and residential development tensions with small-scale fishers are significant, exemplified by sand mining companies controlling catchment zones in South Sulawesi, excluding small-scale fishers from their livelihoods.[2] These conflicts are often highly place-specific and manifest both spatially and among the involved actors.

Small-scale fishers and government policies

Government involvement in Indonesian fisheries can exacerbate conflict with small-scale fishers, as policies incite tensions or amplify existing social dynamics through their distribution mechanisms.[3] The Indonesian government currently provides extensive fuel, gear, and insurance subsidies to small-scale fishers; however, these subsidies can be inequitably distributed to fishing communities.[4] Notably, gender can play an important role in subsidy access. Many fisherwomen, despite performing most of the fishing labor in some areas, often classify themselves as 'housewives' on government identification cards, excluding them from institutional support and resources for their work.[5]

More broadly, several commentators argue that government policies tend to favor large-scale fishing efforts more than small-scale efforts. Shifting bans on trawling equipment, known as *cantrang*, have caused significant conflict with small-scale fishers who use traditional methods.[6] Policies aimed at increasing fish catches in traditionally fished areas often privilege destructive fishing practices, further marginalizing small-scale fishers.[7]

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[1] Mark P. Hampton and Julia Jeyacheya, "Power, Ownership and Tourism in Small Islands: Evidence from Indonesia," *World Development* 70 (June 1, 2015): 481–95, https://doi.org/10.1016/j.worlddev.2014.12.007.
[2] Lucentezza Napitupulu and Smita Tanaya, "Better Care for Locals and the Ocean to Make Indonesia's Blue Economy More Viable," The Conversation, July 4, 2023, http://theconversation.com/better-care-for-locals-and-the-ocean-to-make-indonesias-blue-economy-more-viable-207403.
[3] Maarten Bavinck, Svein Jentoft, and Joeri Scholtens, "Fisheries as Social Struggle: A Reinvigorated Social Science Research Agenda," *Marine Policy* 94 (August 2018): 46–52, https://doi.org/10.1016/j.marpol.2018.04.026.
[4] Andre Notohamijoyo, Adhi Wiyata, and Mustaidz Billah, "Sustainable Fisheries Subsidies for Small Scale Fisheries in Indonesia," in *Proceedings of the Proceedings of the 1st International Conference on Environmental Science and Sustainable Development, ICESSD 2019, 22-23 October 2019, Jakarta, Indonesia* (Proceedings of the 1st International Conference on Environmental Science and Sustainable Development, ICESSD 2019, 22-23 October 2019, Jakarta, Indonesia, Jakarta, Indonesia: EAI, 2020), https://doi.org/10.4108/eai.22-10-2019.2291463.
[5] Vinni Nurizki and Jensi Sartin, "Fisherwomen in the Fisherman's World? Improving Access for Women in Indonesian Fisheries | United Nations Development Programme," United Nations Development Program, December 3, 2021, https://www.undp.org/indonesia/news/fisherwomen-fishermans-world-improving-access-women-indonesian-fisheries.
[6] Basten Gokken, "Indonesia Reimposes Ban on Destructive Seine and Trawl Nets in Its Waters," *Mongabay*, July 28, 2021, sec. Environmental news, https://news.mongabay.com/2021/07/indonesia-reimposes-ban-on-destructive-seine-and-trawl-nets-in-its-waters/.
[7] Lukman Daris, Andi Aslinda, and Nuraeni L Rapi, "Forms and Strategies of Conflict Resolution in Fishing Resources Utilization in the Coastal Area of Maros District, South Sulawesi Province" 10, no. 6 (2017).

Small-scale fishers and industrial fishers

Many small-scale fishers in Indonesia, particularly those from traditional fishing communities, claim sovereignty over historical fishing grounds through Hak Ulayat Laut (HUL), or sea tenure. Conflicts frequently arise when external fishers, especially industrial ones, encroach on these traditional territories.[8] The resulting conflicts feature diverse and sometimes violent outcomes, including reports of local fishers stabbing intruders and fatal collisions with external fishing vessels. Internal migratory trends, such as the movement from inland communities in Papua to coastal areas, have also significantly contributed to conflicts with small-scale fishers.

These conflicts mirror Indonesian social dynamics, especially as local communities assert sovereignty over traditional grounds. Frequently, better-resourced fishers travel from centrally located islands to smaller, less powerful islands to improve their harvests. These situations are further aggravated by external fishers using modern, destructive fishing equipment – such as trawling and purse-seine nets – in areas designated for traditional methods.[9] Areas of high fish productivity correlate strongly with increases in blue foods conflict, as a country-wide study by Lu and Yamakazi (2023) demonstrates. Such areas often experience heightened fishing intensity with more efficient, mechanized equipment, which can increase conflicts as fisheries industrialize. For example, Lu and Yamakazi link western Indonesia, particularly the national capital region, with much higher rates of violent conflict.[10] The differences in fishing intensity and competition between western and eastern Indonesia also arise from differing fishing goals: while western Indonesia primarily fishes for export, eastern Indonesia tends to fish for local consumption, tempering the profit incentives that lead to conflict.

[8] Dadan Zulkifli et al., "A Conflict Analysis of Management of Fishery Resources in Kalimantan, Indonesia," n.d.
[9] Yifan Lu and Satoshi Yamazaki, "Fish to Fight: Does Catching More Fish Increase Conflicts in Indonesia?," *World Development* 170 (October 1, 2023): 106337, https://doi.org/10.1016/j.worlddev.2023.106337.
[10] Lu and Yamazaki.

2. Methodology

This report examines coastal resource conflicts and resolutions in five diverse regions: the Arabian Sea, Nova Scotia, South Africa, the Colombian Pacific, and West Africa (Ghana, Liberia, and Senegal) (see Figure 1). Each location was selected for its unique resource management and conflict resolution landscape, revealing common themes that are of relevance to Indonesia. Expert interviews highlighted key conflicts in global fisheries and the strategies used to address them.

Figure 1: Map of case study locations.

Limitations

Coastal resource conflict management is an emerging focus in many countries, and this report specifically addresses conflicts within fisheries systems. Some conflicts are relatively new, driven by advancements in fishing technologies and the rapid expansion of global fishing fleets. Thus, some case studies focus specifically on regional conflicts and offer recommendations for management – though not all have been implemented. Another limitation is that we were not able to secure expert interviews for every case study; for those cases, we relied instead on existing research about regional conflicts.

Lastly, this research focuses exclusively on fisheries conflicts outside of Indonesia and does not assess the feasibility of conflict resolution strategies within the Indonesian context. Instead, this report presents potential conflicts that may arise globally in coastal resource management. Not all imagined conflicts may be applicable to Indonesia. The overall goal is to provide both specific interventions for global coastal resource management conflicts and a broad range of case studies that could inform new approaches within Indonesia.

3. Strategies to Address Key Conflict Areas

Introduction

We apply an upstream-to-downstream approach to categorize how governments address conflict through policy and practice within the blue foods sector. The most "upstream" interventions focus on reducing the prevalence of conflict and increasing equitable outcomes by addressing root causes. One example that we highlight is a lack of diverse representation in fisheries policy decision-making.

We define an intervention point as a change within the blue foods system that can create significant ripple effects due to the intersection of multiple issues at this nexus. For example, building awareness around fishing legislation – which is our second method for addressing conflict – targets both the inequalities in understanding between small-scale and industrial actors and emphasizes the need for inclusive policymaking.

More "downstream" interventions tackle conflict directly, such as resolving legal disputes through courts or traditional peacemaking practices. Broadly, upstream conflict mitigation aims to reduce conflict risk factors and preemptively address these forces before they materialize. Downstream mitigation deals with conflict that has already occurred. This sequential upstream-to-downstream approach enables us to explore a wide range of strategies available to regulators for addressing conflict in the blue foods sector. We illustrate this conceptual categorical approach in Figure 2.

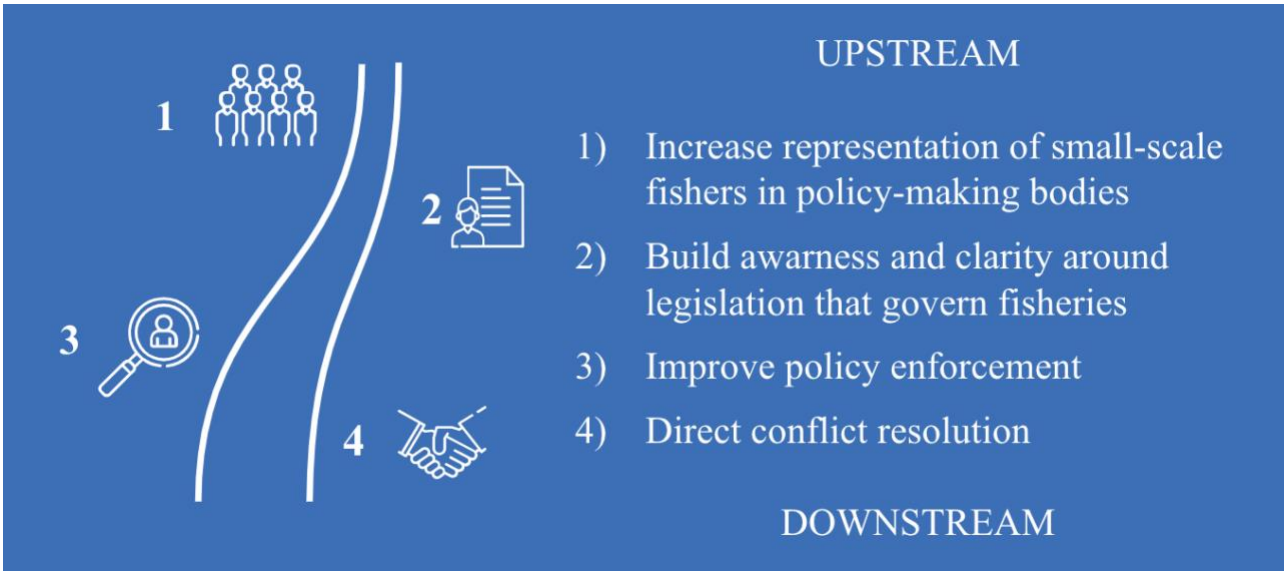

Figure 2: Categorical Approach for Addressing Conflict Upstream to Downstream.

3a. Collaborative Zoning Development

Place in Political Process	**Key building blocks**
Representation in political decision-making	1. Comprehensive understanding of coastal spatial use a. Understand the site-specific spatial needs of small-scale fishers and other users 2. Open communication of all information and data a. Ensure the accessibility of science and policy to all stakeholders 3. Broad and emergent definition of stakeholders by organizing bodies a. Civil society organizations and civil leaders can represent broad stakeholder needs
Conflict(s) addressed	
SSF and other coastal users	
Case studies	
The Arabian Sea (Maldives, Lakshadweep)	

Many coastal conflicts originate because of the variation in coastal area zoning for different uses in order to protect different actors' interests. Common conflicts in Indonesia that exemplify these tensions include conflicts between small-scale fishers and tourism as well as tourism-driven development projects; conflicts between small-scale fishers and marine protected areas and the harvest and access restrictions associated with them; as well as conflicts between small-scale fishers and industrial fishers using and often depleting the same fishery resources.

Zoning has emerged as a key strategy to mitigate these conflicts to separate spatial uses and prevent or defuse tense interactions between actors. This zoning most often takes the form of partially or totally restricting some actors' use of space in order to better protect the interests of another coastal user. However, like all coastal policies, zoning can inadvertently become a tool for instigating further tensions rather than a solution. We find that **representation in political decision-making** early in the period that demarcates progress contributes significantly to the effectiveness of defining fisheries' zones. Our case studies show how *collaborative zoning development* is a critical strategy for short- and long-term conflict mediation between small-scale fishers and other coastal users. Mitigating these kinds of conflicts can be complex due to the number of actors with competing interests in coastal spaces. Many of these actors are groups that policymakers cannot always easily observe or even predict, but that nevertheless form key ecosystem stakeholders.

In our case study research, we saw examples of how collaborative zoning development operated successfully and unsuccessfully across the Arabian Sea, particularly in **India's Lakshadweep archipelago** and in the **Maldives** as well as in **South Africa**. Our research evidence indicates that effective collaborative zoning development depends on early and consistent engagement with stakeholder group leaders as well as clear and open channels of communication.

When collaborating with small-scale fishers, engagement depends on understanding **how all stakeholders use the area** to understand what restrictions or changes can be made for their use of the area. In Lakshadweep, where an NGO worked to protect a critical grouper aggregation site on a reef increasingly used by small-scale fishers, this understanding took the form of extensive consultation with every single fisher on the nearby atoll in order to develop a plan for a "floating reserve" that protected the reef for the fortnight when the grouper spawned. On a national scale, after the Maldives saw an extensive backlash against the restriction of fishers from resort lagoons, the government has embarked on a different approach as they develop more zoning regulations.[11] As many fishers use those areas to catch baitfish, the government is now mapping all bait-fishing grounds across the country, with the goal of using that atlas in consultation with fishers to ensure that future zoning regulations take into account fishers' *site-specific spatial needs*. South Africa provides an example of how community collaboration can be institutionalized through the Small-Scale Fisheries Policy of 2012, which promotes a community-based approach to developing zoning regulations.

The initial success of both these case studies also relies on **open channels of communication**, where *science and policy are made accessible* to diverse fisher communities. Creating zones to protect the groupers as well as small-scale fishers required the NGO to develop an extensive science communication program to share details about the aggregation with nearly every single member of the local community, including data on abundance as well as underwater videos of spawning, a perspective many fishers never get to witness.[12] This communication helped align the community's interest in the creation of the reserve with the NGO's underlying intentions for marine conservation; such communication also avoided seeding further local conflict from arbitrary zoning laws misaligned with community goals. We see the failure of that model in the Maldives, where conflict resulted due to the exclusion of fishers from resort lagoons without prior consultation or information.

However, we see it is critical to **define stakeholders broadly** in these collaborations to ensure the sustainability of these spatial restrictions. The Lakshadweep reserve ultimately failed despite the best intentions of the surrounding community because fishers from further islands began visiting the reef to harvest during the restricted periods. As they had not been a part of the initial engagement process, few of these fishers were invested in protecting the groupers and the research on the aggregation's importance had not been made available to them, which provided little incentive to restrict fishing of an increasingly lucrative economic resource. The NGO had planned their collaborative process based on what proved an incomplete characterization of the reef's stakeholders and—given the labor-intensive nature of their consultations with every single local fisher—that collaboration and communication proved less feasible to replicate across the archipelago. The NGO reflected on how one missing piece that might have improved engagement was the presence of strong civil society aggregations, that effectively and

[11] Riyaz Jauhauree, Maldives fisheries conflicts, May 21, 2024.
[12] Mayuresh Gangal, West Indian coastal policy, April 25, 2024; Rohan Arthur, May 3, 2024.

thoroughly represented stakeholder interests and might have offered a centralized communication portal to more effectively understand and interact with the stakeholder landscape without assumption.

3b. Inclusive Allocation of Government Resources

Place in Political Process	**Key building blocks**
Representation in political decisionmaking	1. Increasing political power of small-scale fishers in policymaking a. Recognition of the ways that "lived experiences" can bring expert knowledge into policy design 2. Building trust and respect with all stakeholders a. Ensure efforts are made to improve relationships and build an understanding of common ground 3. Recognition of social movements supported by scientific evidence in bringing awareness to sustainable fisheries management. a. Community voices are upheld in advocacy and recognized.
Conflict(s) addressed	
SSF and political leaders/organizations	
Case studies	
Nova Scotia, South Africa, Kerala	

Conflicts in fisheries management often arise due to the political marginalization and exclusion of small-scale and subsistence fishers from decision-making processes, leading to policies that favor large-scale actors. This imbalance, along with the undervaluation of local fishers' expertise, fosters resentment, non-compliance, and opposition to policies perceived as harmful. Additionally, the lack of direct engagement between policymakers and fishers perpetuates misunderstandings and stereotypes, exacerbating tensions. Increasing the political power of small-scale actors, ensuring equal representation, and fostering mutual empathy and respect are strategies designed to address these underlying issues and promote ecological sustainability and social harmony.

Increasing the political power of small-scale actors has been a key strategy for reducing the prevalence of fisheries conflict and promoting co-management of marine resources. When small-scale and subsistence fishers are included in policy-making decisions, their expertise is relegated to the role of "lived experience" expert, without sufficient recognition of the ways in which this experience confers deep insight into the characteristics of effective policy design and implementation. Reserving a seat at the table for small-scale and subsistence fishers at every level of political decision making and ensuring the active integration of their perspectives into fisheries policy are powerful levers for catalyzing adherence downstream and increasing agency and self-determination. Our case studies show how the collaborative involvement of small-scale fishers in policy-making decisions is a critical strategy for short- and long-term conflict mediation as it incorporates real-time perspectives and opinions of those who will be impacted first.

In our case study research, we saw examples of how political representation by incorporating and involving community voices operated successfully across **Nova Scotia, Kerala, and South Africa**. Effective collaboration among political leaders and community stakeholders depends on early and consistent engagement and clear and open channels of communication.

If local authorities and fishing communities perceive exclusion or the undermining of their agency to be at play in the development of fisheries policy, their adherence is rare and conflict-abundant. One strategy for meaningfully increasing the political leverage of small-scale and subsistence fishers is to create opportunities for direct interpersonal engagement with policymakers to foster greater mutual empathy and respect. Social spaces in which political representatives can engage with fishers individually can promote both greater consideration of the impacts of policy on small-scale and subsistence fishers' lives and an understanding, at the systems level, of the competing interests that challenge representatives in designing these policies.

One notable example is Nova Scotia in October 2020, when the Government of Canada appointed Mr. Allister Surette as Federal Special Representative, to act as a neutral third party to help rebuild trust between commercial and Indigenous fishers after an autumn season marked by unrest and violence.[13] To understand what was contributing to ongoing unrest, and to find ways to improve relationships and build understanding, common ground, trust, and respect, Mr. Surette sought all parties' perspectives, including those of Indigenous rights holders, non-Indigenous peoples, and others (including all levels of government) involved in the fisheries.

Therefore, when incorporating the voices of small-scale fishers into refining rights and treaties, engagement looks like including respecting stakeholders' perspectives and hearing their needs upon building trust. In Nova Scotia, Canada, historic treaties were revised in order to mediate conflicts between Indigenous and non-Indigenous fishers, with specific attention to the inclusion of previously excluded groups. To make room for inclusive participation and voices, the Department of Fisheries and Oceans made efforts to have negotiations on Rights and Reconciliation Agreements (RRA) with 34 Mi'kmaq and Maliseet First Nations. The objective was to address and recognize the historic treaty rights as well as update them with new information and needs. The community engagement affirmed the First Nations' treaty right to fish, hunt, and gather in pursuit of a moderate livelihood. What was a violent conflict between Mi'kmaq and non-Indigenous fishermen has become a collaboration that involves all perspectives. The Government of Canada recognizes this right and continues to work with First Nations to implement the *Marshall* decisions.[14]

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[13] Government of Canada, "Study on the Implementation of Mi'kmaq Treaty Fishing Rights to Support a Moderate Livelihood," Fisheries and Oceans Canada, January 12, 2021, https://www.dfo-mpo.gc.ca/transparency-transparence/briefing-breffage/2021/livelihood-subsistance-eng.htm
Michael MacDonald, "Conflict over New Indigenous Lobster Fishery Continues to Smoulder amid Some Progress," The Canadian Press, December 19, 2022, https://globalnews.ca/news/9358479/indigenous-lobster-fishery-conflict-progress/.

[14] Government of Canada, "Study on the Implementation of Mi'kmaq Treaty Fishing Rights to Support a Moderate Livelihood," Fisheries and Oceans Canada, January 12, 2021.

In Kerala, India, protests led by the Fishworkers Association resulted in significant policy changes to protect the interests of small-scale fishers. The association's advocacy highlighted the need to safeguard fish during their spawning periods, which are crucial for maintaining fish stocks targeted by small-scale fishers. In response to these demands, the Majumdar Committee was formed to represent the fishers' interests and address their concerns.[15]

One of the major outcomes of the protests was the enactment of a ban on monsoonal fishing, designed to prevent industrialized fishers from depleting fish stocks during the spawning period. This ban, although opposed by many industrialized fishing groups who picketed the secretariat in response, was upheld with the strong support of scientists who provided advocacy for fisheries sustainability. Additionally, the protests led to the establishment of nearshore zones specifically designated for small-scale fishers, ensuring their access to essential fishing areas. These measures marked a significant victory for the Fishworkers Association, demonstrating the power of organized social movements supported by scientific evidence in achieving sustainable fisheries management.

There is a critical need to define stakeholders broadly in these collaborations to ensure the sustainability of contributions. In South Africa, the stated goal of the country's small-scale fisheries policy is to "fulfill the constitutional promise of substantive equality." The sector takes a quota-permitting system approach to achieve this aim. This approach is codified in the Marine Resources Living Act (MLRA) of 1998.[16] This legislation was the product of a participatory process involving a diverse range of stakeholders but still fell short of the kind of transformative change that would meaningfully reduce conflict in the sector. In South Africa, the well-established companies, which had been in operation since the 1700s, still retain disproportionate power in the system today. Analysis of the reasons why this practice fell short of yielding an equitable policy outcome and continues to prove a source of conflict may illuminate what is needed for participatory policymaking in the Indonesian context.

[15] Rohan, Mathews. "Fishworkers Movement in Kerala, India." ritimo, July 1, 2011. https://www.ritimo.org/Fishworkers-Movement-in-Kerala-India.
[16] Department of Agriculture, Forestry and Fisheries. (1998). Marine Living Resources Act, No. 18 of 1998. Government Gazette, Republic of South Africa.

3c. Communicating Spatial Rights

Place in Political Process	**Key building blocks**
Policy clarity and communication	1. Unclear zoning laws lead to gaps in compliance a. Exceptions in zoning law complicate the enforcement of restrictions for industrial fishers within SSF-exclusive zones b. Industrial fishers abuse confusion of laws to overfish in the exclusive zones, leading to diminished catch for SSF 2. Lack of trust in systems a. SSF incorrectly believe they are the only ones allowed to fish in exclusive zones, creating conflict
Conflict(s) addressed	
SSF and industrial fishers	
Case studies	
Ghana, West African Coast	

Conflicts between and among fisheries commonly arise when policies are unclear, have exceptions, or are not communicated properly. A key theme found throughout SSF fisheries conflict resolution strategies is the creation of exclusion zones. In the case of Ghana, this zone is denoted as the Inshore Exclusion Zone (IEZ). This IEZ sets out to protect the livelihood of SSF by providing them a zone where they do not have to compete with industrial fishers and to reduce conflicts between the SSF and industrial fishers.[17] This section will focus on the ways that the Ghanaian IEZ is failing to achieve its full potential due to unclear boundaries and allowed exceptions in the zoning policy.

The current delineation of the Ghanaian IEZ allows for confusion about where it resides due to its irregular boundaries, which extend between six nautical miles from shore in some areas and ten to twelve nautical miles from shore in others.[18] The current delineation combines metrics of both depth and distance from shore. These irregular boundaries cause confusion for where industrial fishers are allowed to fish and not, leading to conflict between SSF and industrial actors. The SSF might believe that they are within the IEZ boundary due to their preferential way of measuring depth as a marker, but the combination of distance from shore often leads to SSF being outside of the IEZ. This leads to conflict between the small-scale and industrial actors because of beliefs surrounding who is legally allowed to fish in these areas.

The IEZ policy also fails to achieve its goal of reducing conflict because of the exceptions for some semi-industrial boats to fish within it, leading to increased levels of IUU fishing. These

[17] "RECOMMENDATIONS FOR THE REFORM of Ghana's Inshore Exclusion Zone (IEZ) Reserved for Small-Scale Fishing Activities" (Environmental Justice Foundation, 2021), https://ejfoundation.org/resources/downloads/Briefing_extension_IEZ_boundary-2021-v2a.pdf.
[18] "RECOMMENDATIONS FOR THE REFORM of Ghana's Inshore Exclusion Zone (IEZ) Reserved for Small-Scale Fishing Activities."

exceptions lead to an increased number of industrial-scale boats within the IEZ and allow for extra competition against the SSF. Other non-allowed semi-industrial boats are able to camouflage as an allowed exception within the IEZ, due to a lack of ability for regulators to know which boat has been officially granted an exception to fish within the IEZ or not. The SSF believe in the essence of the policy, that they are the only ones allowed to fish in the IEZ. These two factors combined lead to increased conflict within the IEZ between SSF and industrial fishers, and also between SSF because of the dwindling fish stocks. These SSF are then often not able to catch a single fish within the IEZ and are forced to go outside of the IEZ and face an increased risk of conflict, destruction of equipment, unsafe conditions, and even death.[19]

Ghana's IEZ fails to achieve its goals of protecting SSF through its lack of clarity within the policy as it relates to zoning boundaries and allowed exceptions in the IEZ. Zoning boundaries must be clearly defined and easily identified by all actors to better ensure the policy's effectiveness. Exceptions to the zoning policy must also be kept at a minimum so that the zone can be properly enforced without confusion. Minimizing confusion about the zoning policy will decrease conflict between all actors and allow effective implementation of exclusive zones for SSF.

3d. Government Support for Fisheries Co-management

Place in Political Process	**Key building blocks**
Implementation and enforcement	1. Lack of long-term government support of robust fisheries co-management systems leads to their failure a. Liberia has robust laws surrounding co-management but failed to support these systems after their initial construction. b. Little to no transfer of power from the central government to the local co-management staff c. A lack of funding and structural support led to the effective dissolution of these systems d. A loss of trust in co-management systems stemming from a lack of open communication between the central government, local managers, and stakeholders
Conflict(s) addressed	
Local and government regulators	
Case studies	
Ghana & Liberia, West African Coast. Nova Scotia, Canada.	

[19] "RECOMMENDATIONS FOR THE REFORM of Ghana's Inshore Exclusion Zone (IEZ) Reserved for Small-Scale Fishing Activities."

Collaborative management systems, also known as co-management systems, set up partnerships between local resource users and resource managers.[20] In the fisheries context, this means a partnership between the fishers and the government regulators and agencies so that the fishers have more of a say when it comes to rulings that will affect them. This is important, especially in contexts where the top-down lawmaking and governing approaches are applied broadly, and affect a variety of groups of people, especially in remote coastal communities.

Liberia has well-developed co-management systems, yet both systems have failed to reach long-term success due to failures from their respective central governments.[21] In Liberia, their co-management systems suffer from a lack of cooperation in management from the central government, a lack of sufficient funds to support the co-management initiatives with no long-term funding plans, and an increased distrust between local stakeholders and their co-management leaders.[22]

To begin, the Liberian central government has treated the co-management systems as instruments to achieve their management goals, rather than as a system to collaborate with locals to create synergistic management plans. For the co-management system to thrive, the local stakeholders must have the power to enact change, and not to act as local enforcers of the central government's will.

The second problem plaguing the Liberian co-management systems is a lack of long-term funding and funding systems to support it. For one collaborative management association (CMA), their funding is intended to come from membership dues, money raised from the local fish landing cluster, and 10% of the license and registration fees paid to the central government. Instead, the central government is no longer giving these payments to them and this leaves them without any funding to pay the local CMA managers. This begins the downfall of the CMA because the local managers also need to have a source of income, so their incentive to work is reduced to a volunteer basis.

The third problem is the growing rift between the CMA managers and the local fishers and stakeholders. The local CMA stakeholder members are seeing that their membership dues are not being used locally, since they are mostly being taken by the central government instead. This is compounded by the CMA not being transparent about how the dues are being used. This, combined with the lack of power that the CMA is able to enact since the Liberian central government has been using the CMA as a tool to achieve its goals, has only increased distrust in the CMA, further pushing it towards failure.

[20] "Co-Management: A Tool for Delivering Legal, Inclusive, and Sustainable Fisheries in Liberia," Co-Management Policy Briefing (Environmental Justice Foundation, February 24, 2021), https://ejfoundation.org/reports/co-management-a-tool-for-delivering-legal-inclusive-and-sustainable-fisheries-in-liberia.
[21] Cephas Asare, May 1, 2024.
[22] Ibid.

In conclusion, co-management systems are effective ways to promote just fisheries management systems. They provide clear communication systems for local stakeholders and central governments to cooperate on the local management of these fisheries while adapting the goals of the central government for each local context. These co-management systems are prone to failure if they do not receive adequate support from the central government. In Liberia, the local co-management systems have failed to reach their full potential due to a lack of cooperation from the central government, a failure from the central government to devolve some decision-making power to the local CMAs, a lack of funding to support the local CMA, and a lack of clear communication growing a rift of distrust between the central government, the local CMA, and the local CMA members and stakeholders.

3e. Community-Driven Monitoring

Place in Political Process	**Key building blocks**
Implementation, monitoring, and enforcement	1. Community-driven monitoring can be a downstream consequence of early community engagement a. Fishers are invested in implementing regulations that align with their interests 2. Ensure fishers have the power to act on illegal activities a. Community accountability is a form of power b. Legal action can be a useful complement 3. Integrate community monitors with government channels for enforcement a. Local champions drive regulatory compliance
Conflict(s) addressed	
SSF and other coastal users	
Case studies	
The Arabian Sea (Lakshadweep)	

Monitoring and enforcing regulations that span coastal spaces can be very difficult because of the large areas covered by coastal zones and their inherent inaccessibility and difficulty in navigation. We have previously addressed, however, why restrictions in the use of coastal spaces can be critical to protecting disenfranchised user groups, such as small-scale fishers. But for such restrictions to work, they must be enforced. These zoning regulations arise to defuse conflicts between small-scale fishers and overlapping coastal users, but accountability is a critical piece of reducing unwanted interactions between them.

As such, we observed repeatedly in our case studies how the downstream implementations of spatial regulation were as critical to success as the initial creation of the regulation. In our case studies, we saw how enforcement and implementation that invested the communities affected by the regulations offered an effective complement to the top-down enforcement of zoning regulations that accompany government-created policy.

Community-driven monitoring occurs when community members in places where zoning regulations have been enacted work to observe and hold accountable any violators of these regulations, as opposed to outside government officials as the primary enforcers. We observed how this community investment in enforcement can often be a **downstream consequence of early and integrated community engagement** in the decision-making process. In Lakshadweep, when the Bitra floating reserve was operational, the NGO and reporters observed how community members assigned themselves as "unofficial reef wardens" and sat on the dock to watch the reef during the closure periods.[23] The extensive consultation had invested the community in the zoning structure's goals and now they volunteered to help ensure it would happen. Because the reserve worked in such a small community, enforcement depended as much on the power of *community accountability* as any other political process. Social bonds and guilt functioned like a deterrent in the way a police-imposed fine did.

However, these enforcement mechanisms functioned because the **power differential functioned for fishers**. In Bitra, fishers had agency over their still rarely visited waters; in other situations where mechanized ships with significant industrial and financial power violated regulations, small-scale fishers held significantly less power for enforcement. The Bitra reserve failed when the community held accountable for the grouper aggregation expanded beyond Bitra and outsiders began violating the rules. With few social bonds binding outsiders and Bitra residents, and thus minimal possible social or legal consequences, voluntary enforcement proved more difficult.

Ministry of Marine Affairs and Fisheries has pioneering programs that formalize this community-driven monitoring in ways that expand its bandwidth and the power of enforcers, most notably through Pokmaswas.[24] By **connecting monitors with official channels of enforcement**, the program complements community accountability measures with additional legal power while still ensuring *local champions drive regulatory compliance.*

[23] Rucha Karkarey and Mayuresh Gangal, "Book Excerpt: How the Bitra Floating Reserve Was Born," in *At the Feet of Living Things* (HarperCollins, 2022), https://science.thewire.in/culture/books/bitra-floating-reserve-book-excerpt/.
[24] Fathul Rakhman and Wahyu Chandra, "Indonesian Fishers Mount a Community-Led Fight against Destructive Fishing," *Mongabay Environmental News*, June 4, 2024, https://news.mongabay.com/2024/06/indonesia-fishers-marine-patrol-pokmaswas-destructive-illegal-fishing/.

3f. Traditional and Judicial Resolution Approaches

Place in Political Process	**Key building blocks**
Direct Conflict Resolution	Pathway 1: Formal Court Systems - Well-established structure for seeking redress - Historic inequalities and high litigation costs may bias legal outcomes against SSF Pathway 2: Traditional Peacemaking Practices - Can promote social cohesion if applied with sensitivity to cultural practice's diverse landscape
Conflict(s) addressed	
SSF and industrial actors, SSF and government policies	
Case studies	
South Africa, Ghana	

Direct conflict resolution is the most downstream, or immediate, approach to addressing conflict in the blue food sector. Direct conflict resolution involves **creating pathways for legal redress** for fishers who have experienced discrimination under the law or whose activities have been impeded by the unlawful actions of the other actors in the ecosystem. For example, artisanal fishers whose livelihoods are threatened by unlawful activities of large-scale industrial actors can seek legal redress through the court system and this is a pivotal way in which power can be redistributed across actors. Focusing on **addressing fishing conflicts that have already occurred**, direct resolution requires cooperation from a multiplicity of blue foods actors as well as the preservation and strengthening of traditional peacemaking practices that serve as essential companions to more formalized court proceedings.

While the legal court system provides a structured pathway toward direct conflict resolution, there are notable drawbacks to reliance on legal proceedings as the sole method of mediation. In South African fisheries policy, the legacy of racial apartheid is still incredibly salient. Since democratization, a key priority in the blue foods sector has been the rightful redistribution of legal rights and resources across racial lines and courts have emerged as a critical tool in this process.[25] SSF are often disproportionately at risk of racial discrimination compared to industrial and foreign actors and conflicts, especially those around quotas and permitting, often result in lengthy court proceedings.[26] While courts are a critical mechanism for addressing these conflicts and ensuring equality under the law, this mode of direct conflict resolution is not without its

[25] Interview with Qurban Rouhani, Director of the Rural Fisheries Programme at the Department of the Ichthyology and Fisheries Science of Rhodes University, South Africa
[26] Interview with Kumi Naidoo, human rights and climate justice activist – former International Executive Director of Greenpeace International and Secretary General of Amnesty International

challenges, namely long time delays, lack of accessibility and economic barriers, and potential for bias in rulings as historic inequalities retain lasting effects.[27]

Traditional peace-making practices, especially those that originated in coastal communities and co-evolve with fisheries development, can offer a key companion to the formal court system. Taking Ghana as an example, we find that conflicts between actors in the blue foods sector are often resolved through **community-based tribunals.**[28] By leveraging contextually specific traditions, social structures, and cosmologies, informal and community-based conflict resolution can be extremely effective in creating space for common ground and promoting peaceful collaboration between actors who share this cultural background. In South Africa, for example, this process has granted customary fishing access to MPAs to small-scale indigenous fishers based on their ancestral claims to the land. An emphasis on **restorative justice and reconciliation** was evident across community-based peacemaking transitions in both South Africa and Ghana fisheries.[29]

Best utilized in tandem, neither court systems nor traditional practices are without their shortcomings in effectively mediating blue foods conflict. In South Africa, fraudulent fishing permits known as "paper quotas" continue to undermine the effectiveness of legal proceedings.[30] In regions that have experienced violence in the recent past, preference for a localized mediation over formal ones may be connected to harmful collective memories attached to formal court proceedings, like that of the Truth and Reconciliation Committee in post-apartheid South Africa.[31] To add nuance to this picture, the overlap between industrial and SSF zones in Ghana that often exacerbates conflicts cannot be resolved through traditional peacemaking alone, regardless of the social costs associated with court battles.[32]

Successful direct conflict mediation in fisheries requires a **balanced integration of formal court proceedings and traditional peace-making.** In applying these two methods of resolution, an eye toward contextuality is paramount: there is not a one-size-fits all solution to resolving conflict and instances must be addressed on a case-by-case basis. The unique socio-cultural factors that surround each conflict must be taken into account to determine which pathway will be most effective – and the infrastructure that supports both legal proceedings and community-based strategies can be strengthened through targeting policy approaches. A **dual approach** to conflict mediation can promote equality between small-scale fisheries and industrial actors by creating pathways for redress and redistribution of resources as a reconciliatory practice.

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[27] Ibid.
[28] Asare, interview.
[29] Svein Jentoft and Ratana Chuenpagdee, eds., *Interactive Governance for Small-Scale Fisheries: Global Reflections*, vol. 13, MARE Publication Series (Cham: Springer International Publishing, 2015), https://doi.org/10.1007/978-3-319-17034-3.
[30] Interview with Qurban Rouhani, Director of the Rural Fisheries Programme at the Department of the Ichthyology and Fisheries Science of Rhodes University, South Africa
[31] Asare, interview.
[32] Asare.

4. Conclusion

In this report, we present six strategies to address key dimensions of small-scale fisheries conflict in Indonesia. These strategies are tailored to mitigate the occurrence of fisheries conflict by reducing triggers and providing better mechanisms for resolution after conflicts arise. We approach conflict as a *holistic process* rather than isolated incident, offering strategies that span from upstream to downstream of the conflict's visible occurrence. Our strategies advocate for upstream **stakeholder representation in political processes** and **enhanced clarity and communication of rights and regulations** to reduce conflict triggers. Additionally, we emphasize **improved monitoring and enforcement** to mitigate conflict occurrence, and downstream **direct resolution approaches** to prevent conflict re-occurrence.

The following six strategies, drawn from case studies and presented within the upstream-to-downstream framework, have seen success in mitigating conflict:

(1) **Collaborative zoning development** helps protect the interests of small-scale fishers in situations where they are often politically disadvantaged.

(2) **Inclusive allocation of government resources** facilitates the development of just policies.

(3) **Communicating spatial rights** ensures marginalized stakeholders understand how policies protect them and function as intended.

(4) **Government support for co-management** helps policies for collaborative fisheries control function in grassroots environments.

(5) **Community-driven monitoring** empowers community members to collaborate with the government in protecting their livelihoods.

(6) **Traditional and judicial resolutions** highlight how different strategies can help equitably resolve conflict for stakeholders.

As the blue foods sector becomes increasingly vital for Indonesia's future, it is essential to ensure that marginalized stakeholders, such as small-scale fishers, remain active and empowered. The dynamism of the blue foods sector is expected to grow, driven by shifting population dynamics, changes in the distribution of blue foods due to warming oceans, and the impact of new and emerging technologies on the market. Given these changes, addressing power dynamics and tensions within the blue foods system is crucial. This report aims to inform BAPPENAS about global case studies and key trends in reducing imbalance and conflict in coastal resource management. By examining success and failures, we can hope to illustrate potential directions for the Indonesian National Development Strategy, focusing on building successful, sustainable, and equitable approaches that foster a peaceful blue foods economy.

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Appendix: Case Studies

The following four case studies were selected to reflect the key issue areas affecting conflict in Indonesia's blue foods sector. The four case studies – the Arabian Sea, Nova Scotia, South Africa, and West Africa – span a wide geographic and cultural diversity. We approached these case studies through a series of in-depth interviews with policymakers, activists, and academic researchers with area expertise in blue foods conflict and coastal resource management. Supplementing interviews with independent research, we compiled these case studies with the intent to illustrate the many ways in which conflict in addresses around the globe and to provide inspiration for BAPPENAS to draw from in devising blue food policy for Indonesia. Each case study is organized to first provide an overview and background for the blue food conflict in question, then to enumerate the themes present in each case study, and finally to outline the methods of conflict resolutions implemented in each case study context.

Case Study 1: The Arabian Sea: Indian coastal states and union territories

Grassroots and canopy zoning approaches for sustainable fisheries: successes and failures

Background: As India becomes one of the largest producers of marine catch fisheries, Indian coastal states and territories have become loci for conflicts over generations of fishers. In particular, the west coast of India includes six states with historical and evolving communities of fishers, and borders the highly productive Arabian Sea, where union territories like the Lakshadweep archipelago typify the shifting challenges faced by small island fishers. NGOs, government bodies, and community groups have worked to develop different sets of zoning recommendations to mitigate conflicts across the sea.

Working with these blue foods-based communities has been a governmental and policy goal for decades. The majority of Indian Arabian Sea fisheries occurs within the country's EEZ, where upwellings along the Indian coast lead to large populations of fish, including an abundant sardine and pelagic fishery. Indian fisheries make up 56% of catches within the Arabian Sea Large Marine Ecosystem.[33] Small-scale fishers are critical stakeholders in this economy: small-scale fishers catch 6.5 million tonnes of fish annually, close to the 8.5 million tonnes caught by industrial fishers, despite dramatically different equipment and support.[34] Small-scale fishers and industrial fishers, moreover, tend to target the same fisheries in many locations, making combined small-scale/industrial fisheries critical economic drivers.

[33] M. L. D. Palomares et al., "The Fisheries of the Arabian Sea Large Marine Ecosystem," in *The Arabian Seas: Biodiversity, Environmental Challenges and Conservation Measures*, ed. Laith A. Jawad (Cham: Springer International Publishing, 2021), 883–97, https://doi.org/10.1007/978-3-030-51506-5_38.
[34] D. Zeller et al., "Trends in Indian Ocean Marine Fisheries since 1950: Synthesis of Reconstructed Catch and Effort Data," ed. Haseeb Randhawa, *Marine and Freshwater Research* 74, no. 4 (January 31, 2023): 301–19, https://doi.org/10.1071/MF22148.

Conflict trends and themes: Conflict in India's fisheries tend to occur between small-scale fishers and emerging industrial fishing groups. These conflicts have been driven to a large part by **resource allocation** and **resource competition**.

I. **Small-scale fishers and government policies:** Historically, India's fisheries have been dominated by a large diversity of small-scale fishing communities using a range of traditional fishing methods and targeting many species of fish, but investments in the 1970s and 80s in trawl boats displaced many coastal small-scale fishers towards wage labor on industrialized trawling vessels. These shifts towards industrialized fisheries were driven by state agendas to "improve" backwards small-scale fishing communities and develop their economic livelihoods towards industrial production.[35] On India's west coast, subsidies for trawling equipment separated many formerly homogenous small-scale fishing communities into industrialized and non-industrialized fishers.[36] In the Lakshadweep archipelago, a system of 36 islands in the Arabian Sea that form a union territory of India, similar subsidies for mechanized boats aimed to develop an economy specifically targeting pelagic tuna fisheries, which were deemed "under-utilized" by the government.[37]

II. **Small-scale fishers and trawling fishers:** Resource allocation policies' intersections with increased resource competition and growing fishing intensity, have triggered substantial conflicts between small-scale and industrialized fishers across India's EEZ in the Arabian Sea. Though some small-scale fishers and trawling fishers may have originally come from the same communities, the subsidy allocation has led them on dramatically different paths. Nearshore small-scale fishers on India's northwest coast, represented by the National Fish-workers Forum, rose up in protest to advocate for more equitable policies after several increasingly violent conflicts.[38] Meanwhile, in Lakshadweep, the increased incursion of "mothership" boats from mainland India into small-scale fishers' territories have put pressure on reef ecosystems in a historically pelagic fishery.

Strategies for conflict resolution

I. Community-based zoning policies

NGOs and fisher community groups work together with governmental bodies to develop spatial and temporal boundaries to protect the interests of small-scale fishers.

A. **Lakshadweep archipelago:** Off the island of Bitra within the Lakshadweep archipelago, a temporal MPA was created to protect an important reef fish

[35] Ajit Menon, Merle Sowman, and Maarten Bavinck, "Rethinking Capitalist Transformation of Fisheries in South Africa and India," *Ecology and Society* 23, no. 4 (2018): art27, https://doi.org/10.5751/ES-10461-230427.
[36] Gangal, West Indian coastal policy.
[37] A. Gopalakrishnan, "A Value Chain on Oceanic Tuna Fisheries in Lakshadweep Sea" (Ernakulam District, Kerala: Central Marine Fisheries Research Institute, 2014), https://naip.icar.gov.in/download/79347/205901.pdf/205901.pdf.
[38] Mathews Rohan, "Fishworkers Movement in Kerala, India," ritimo, July 1, 2011, https://www.ritimo.org/Fishworkers-Movement-in-Kerala-India.

spawning aggregation based on research done by the Nature Conservation Foundation (NCF) and engagement with fishers on the nearby island. The boundaries of this temporal MPA were determined based on the stated needs of the island's small-scale fishers and communication of research results.

B. **Kerala, India:** Protests by the Fishworkers Association in Kerala specifically advocated for and ultimately achieved enactment of nearshore zones specifically designated for small-scale fishers. The protests led to the formation of the Majumdar Committee, and the states where protests occurred moved quickly towards enacting the demands of small-scale fishers. A ban on monsoonal fishing in Kerala to protect fish during their spawning periods also resulted from these protests, to prevent industrialized fishers from depleting stocks for small-scale fishers.

II. *Community-driven monitoring approaches*

Monitoring occurs on many levels but depends on effective information being provided to relevant stakeholders on the boundaries of zoning decisions and the investment of all relevant stakeholders in managing fishing territories.

A. **Lakshadweep archipelago**: NCF engaged with every single fisher on the island of Bitra, as well as important community leaders like the local mosque as well as local government bodies, to communicate and develop the proposal for the temporal MPA before the protected area was formalized with the central government. The community volunteered to help monitor and enforce the boundaries of the MPA for the eight days when the protected area came into force, increasing the likelihood the community adhered to its implementation.

B. **Kerala, India**: Monitoring in nearshore regions in Kerala is primarily driven by governmental bodies in charge of enforcing the deep-sea presence of industrializing fishing fleets. Researchers note that monitoring tends to be uneven, especially because many nearshore fisheries cross state boundaries with neighboring coastal states.

III. *Flexible policy frameworks for local adaptation*

Given the diversity of local contexts in India, after the Fishworkers' protests in the 1980s, the state developed the Marine Fisheries Regulation Act as a policy framework for coastal states to adapt for their specific needs. This policy framework gave states a way to create solutions relevant to local needs while following a similar structure.

A. **Indian coastal states**: States developed restrictions on industrialized fishing equipment, such as technical specifications of trawling equipment, in order to protect the interests of small-scale fishers. Each state developed a different set of restrictions based on local contexts; however, broader concerns have been raised about how these policies harmonize with each other given many of these neighboring states are targeting the same fisheries.

Case Study 2: Nova Scotia:

Political representation approaches for inclusive participation of small-scale fishers

Background: In our investigation of conflict dynamics within Nova Scotia's lobster fishery, a significant narrative emerges surrounding the interplay of Indigenous and non-Indigenous interests, echoing historical grievances and contemporary challenges in fisheries governance. The Mi'kmaq fisheries case is a historic and ongoing conflict between the Department of Fisheries and Oceans (DFO) and the Mi'kmaq people of Nova Scotia, which has sometimes led to violent conflicts between parties involved, including tensions between Indigenous and non-Indigenous commercial lobster fishers in Nova Scotia. In the early 1760s, Peace and Friendship Treaties were signed by British authorities and the Mi'kmaq, defining the latter's commercial rights. The treaty right was a promise from the Crown that all Mi'kmaq could fish anywhere, anytime and trade the fish they caught. But in 1993, despite the right to fish guaranteed by treaty, the DFO charged Donald Marshall with illegal fishing without a license and out of season. This arrest marked the beginning of a multi-year legal battle that continued in the courts.[39]

Donald Marshall became an iconic Mi'kmaw figure and was seen as the best representative of his people to defend their rights, having already spent 11 years in prison after being wrongly accused of murder. After numerous requests from Mi'kmaq and non-Indigenous fishers for clarification of the term 'moderate livelihood', non-Indigenous stakeholders and fishers began to actively undermine Mi'kmaq fishing rights, accusing the latter of not respecting federal rules and ignoring initiatives to sustainably manage lobster stocks. This violence has been met with allegations of racism, discrimination, and colonialism by Indigenous harvesters and much of the public and has escalated the nature and extent of the conflict.[40]

Conflict trends and themes: Conflict in the Nova Scotia fisheries tend to occur between small-scale fishers and industrial fishers who want to fish at different times of the year; however, it then extends to a larger conflict on clear rights and regulations. These conflicts have been driven to a large part by **rights and regulations** and **resource competition/management.**

I. **Rights and regulations:** Conflict within this community can be attributed to one cause, the unclear definition for 'moderate livelihood fisheries'. Firstly, Indigenous Mi'kmaq communities in Nova Scotia argue that they have a constitutionally protected right to earn a "moderate livelihood" from fishing, as affirmed by a Supreme Court of Canada decision in 1999 (the Marshall Decision). However, there have been disagreements over the interpretation of this right, particularly concerning the specifics of what constitutes a moderate livelihood and

[39] Abe Street, "Nova Scotia's Billion-Dollar Lobster Wars," *The New Yorker*, May 21, 2024, https://www.newyorker.com/news/dispatch/nova-scotias-billion-dollar-lobster-wars.
[40] Michael MacDonald, "Conflict over New Indigenous Lobster Fishery Continues to Smoulder amid Some Progress," *The Canadian Press*, December 19, 2022, https://globalnews.ca/news/9358479/indigenous-lobster-fishery-conflict-progress/.

how it intersects with existing commercial fishing regulations. Secondly, non-Indigenous fishermen say they worry about their livelihood if all the lobsters are trapped out of season. Especially if lobsters are caught during breeding time.

II. **Resource competition/management:** Indigenous fishers typically operate under moderate livelihood or subsistence fishing licenses, while non-Indigenous fishers operate under commercial licenses. The allocation of resources between these two groups is a key point of contention. Since it was unclear when each group of fishers are allowed to fish, it has led to conflict of using resources.

Strategies for conflict resolution:

I. Inclusive Political Participation

A. To address these complexities and foster cooperation, policymakers have turned to innovative approaches inspired by successful models elsewhere. Recognizing the importance of Indigenous fishing rights and cultural heritage, Nova Scotia has embarked on initiatives to empower Indigenous fishers and enhance their role in co-management arrangements. This includes initiatives to provide Indigenous communities with greater access to fishing quotas, support for economic diversification, and capacity-building programs to strengthen their participation in fisheries governance.

B. The Department of Fisheries and Oceans is currently in negotiations on Rights Reconciliation Agreements (RRA) with 34 Mi'kmaq and Maliseet First Nations, and the Peskotomuhkati Nation, with the objective of addressing and recognizing the historic treaty rights. The goal has been to include more Indigenous voices on the contribution of treaties and rights reform. They aim to clarify and update legal and regulatory frameworks governing the lobster fishery, taking into account Indigenous rights, conservation goals, and the needs of commercial fishermen.[41]

II. Building trust and respect with all stakeholders

A. In Nova Scotia during October 2020, the Government of Canada appointed Mr. Allister Surette as Federal Special Representative to act as a neutral third party to help rebuild trust between commercial and Indigenous fishers after a fall marked by unrest and violence. To understand what was contributing to the ongoing unrest, and to find ways to improve relationships and build understanding, common ground, trust and respect, Mr. Surette sought all parties' perspectives, including Indigenous rights holders, non-Indigenous peoples, and others (including all levels of government) involved in the fisheries.[42]

[41] Government of Canada, "Study on the Implementation of Mi'kmaq Treaty Fishing Rights to Support a Moderate Livelihood," Fisheries and Oceans Canada, January 12, 2021, https://www.dfo-mpo.gc.ca/transparency-transparence/briefing-breffage/2021/livelihood-subsistance-eng.htm.

[42] Street, "Nova Scotia's Billion-Dollar Lobster Wars." https://www.newyorker.com/news/dispatch/nova-scotias-billion-dollar-lobster-wars

Case Study 3: South Africa

Addressing historic inequalities & dual pathways for legal redress

Background: A powerful theme that emerged from our analysis of conflict in small-scale fisheries in South Africa is the way in which social inequalities, both historic and present day, are reflected in fisheries policies and practices and a key source of tension between actors in the system.[43] South African decision-makers have sought to address long-standing inequalities in small-scale fisheries that drive conflict by rebalancing power and access through fishing policies that are participatory and quality-focused in their orientation.[44] Moving from upstream prevention to downstream resolution, these mechanisms include the establishment of a quota permitting system, special granted access to MPAs for traditional lands stewards, and a diversity of direct mediation methods employed differentially across various cultural contexts and communities.[45] This case study examines the successes and pitfalls of these three tools for conflict mediation in small scale fisheries and explores the lessons to be learned from South Africa.

Before 1994, the only individuals who held power in the fisheries system were white – they held the permits, operated the vessels, owned the companies and means of production, and they reaped the benefits of exports and domestic sales.[46] White South Africans were granted sole proprietary rights to the best natural resources and Black and Indigenous South Africans' ownership and access was relegated to homesteads or "Bantustans," less ecologically abundant terrestrial and aquatic territories.[47] After democratization, reallocation of rights and access across racial and ethnic demographics was paramount.

Conflict Trends and Themes: Conflict that stems from this policy in South African small scale fisheries can be attributed to two primary causes: the persistence of racial inequalities in the allocation of permits and the legal loophole that allows for fraudulent permit activity.

1. **Legal Challenges to Unjust Quota Distribution:** The quota system is designed to protect the long-term prospects of the fishing industry – discrimination along the lines of race and socioeconomic class in recent months have led to a number of court cases being brought by small-scale fishers. It is clear from the fact that national exports exceed TAC (total allowable catch) that the persistence of non-permitted IUU fishing is substantial. The phenomenon of "paper quotas" represents an exploited legal loophole by which companies and individual fishermen hold permits without operating a fishing business in

[43] Interview with Qurban Rouhani, Director of the Rural Fisheries Programme at the Department of the Ichthyology and Fisheries Science of Rhodes University, South Africa
[44] Interview with Kumi Naidoo, human rights and climate justice activist – former International Executive Director of Greenpeace International and Secretary General of Amnesty International
[45] Ibid.
[46] Interview with Qurban Rouhani, Director of the Rural Fisheries Programme at the Department of the Ichthyology and Fisheries Science of Rhodes University, South Africa
[47] Ibid.

order to access government subsidies.[48] Efforts to reduce the prevalence of this practice have taken shape as five-year time horizons in which quota-holding operations must prove their legitimacy as a fishery and many conflicts have arisen on claim to legitimacy and rightful holding of permits.[49]

II. **Racial Discrimination in the Law:** The stated goal of the country's small scale fisheries policy is to "fulfill the constitutional promise of substantive equality." The sector takes a quota permitting system approach to achieving this aim. This approach is codified in the Marine Resources Living Act (MLRA) of 1998.[50] This legislation was the product of a participatory process involving a diverse range of stakeholders but still fell short of the kind of transformative change that would meaningfully reduce conflict in the sector. In South Africa, the well-established companies, which had been in operation since the 1700s, still retain disproportionate power in the system today.[51] Analysis of the reasons why this practice fell short of yielding an equitable policy outcome and continues to prove a source of conflict may illuminate what is needed for participatory policy-making in the Indonesian context.

Strategies for conflict resolution:

I. Reducing disputes through protection of ancestral lands

A. One resolution to conflict over rights of access to Marine Protected Areas (MPA) has been to grant customary access based on ancestral claims to the land. There has been pushback against the establishment and expansion of MPAs from SSF in particular as there is already significant competition for limited resources both in terms of spatial territory and fish stocks.[52] Key strategies that emerged in terms of increasing SSF agency and decision-making power included the establishment of collectives that centralize political power: there is great strength in numbers.

II. Strengthening traditional peacemaking practices beyond formal courts

A. There was significant discussion of the fact that community-based tribunals and more localized mediation methods were preferable to court procedures in terms of national centricity and the movement towards a more inclusive and peaceful society.

B. Both Dr. Isaacs and Dr. Rouhina emphasized the fact that something is lost when fishing disputes are brought to court – perhaps a reflection of the common memories of the Truth and Reconciliation Committee and the atrocities of interpersonal violence that were given words in these spaces. Places hold memory

[48] Interview with Qurban Rouhani, Director of the Rural Fisheries Programme at the Department of the Ichthyology and Fisheries Science of Rhodes University, South Africa
[49] Ibid.
[50] Department of Agriculture, Forestry and Fisheries. (1998). Marine Living Resources Act, No. 18 of 1998. Government Gazette, Republic of South Africa.
[51] Interview with Kumi Naidoo, human rights and climate justice activist – former International Executive Director of Greenpeace International and Secretary General of Amnesty International
[52] Ibid.

and it is likely traumatic at collective scale to re-engage formal legal processes. In terms of what these practices look like, Dr. Rouhina emphasized the importance of contextuality – every tribe and locality has a distinct set of traditions around conflict mediation and this diversity must be preserved in order to promote peace across marine geographies.

Case Study 4: West Africa: Ghana, Liberia, & Senegal

Mitigating conflict through government action

This case study will focus on three of the major West African fishing countries, Ghana, Liberia, and Senegal. The West African case study is unique because many of the West African countries have a strong reliance on their fishing sectors to support their people through jobs and as a source of nutrition. The Ghanaian small-scale fishery supports up to three million people among over 200 coastal fishing communities.[53] The Senegalese SSF supply over 80% of the fish landed for the country and fish accounts for 40% of all animal protein consumed in the country.[54] These economic reliances on fisheries, combined with the large number of people involved in these coastal marine fisheries, has led to unique conflicts within the area along with the development of new laws and regulations to help manage and mitigate those conflicts.

One common theme between these three countries is that they all have robust fisheries laws and regulations, but they often fail in implementation and enforcement of them. For instance, the Ghanaian Fisheries Act of 2002, and its subsequent amendments, set out very clear and defined rules and regulations for their fisheries.[55] In 2023, the Environmental Justice Foundation released a briefing discussing the many gaps and failures of implementation of these laws and regulations, such as inconsistent rulings, fines, and punishments.[56] These gaps are allowing for excess illegal, unreported, and unregulated (IUU) fishing within Ghanaian waters and subsequently increased conflicts over these coastal resources. West African waters are estimated to have the highest levels of IUU fishing, compromising up to 37% of this region's catch.[57]

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[53] "On the Precipice: Crime and Corruption in Ghana's Chinese-Owned…," Environmental Justice Foundation, accessed May 17, 2024, https://ejfoundation.org/reports/on-the-precipice-crime-and-corruption-in-ghanas-chinese-owned-trawler-fleet.

[54] "At the Tipping Point: How Bottom Trawling Is Precipitating The…," Environmental Justice Foundation, accessed May 17, 2024, https://ejfoundation.org/reports/at-the-tipping-point-how-bottom-trawling-is-precipitating-the-collapse-of-senegals-artisanal-fisheries.

[55] GNA, "Fisheries Crimes and Prosecution: Has Ghana's Alternative Dispute Resolution (ADR) Proven Effective?," Ghana News Agency, February 20, 2021, https://gna.org.gh/2021/02/fisheries-crimes-and-prosecution-has-ghanas-alternative-dispute-resolution-adr-proven-effective/; "Fisheries Act, 2002 (Act No. 625 of 2002). | FAOLEX," accessed May 17, 2024, https://www.fao.org/faolex/results/details/en/c/LEX-FAOC034737.

[56] EJF, "Securing effective and transparent prosecutions of fisheries violations in Ghana."

[57] TaylorCrabbe and EJF, "Securing Effective and Transparent Prosecutions of Fisheries Violations in Ghana" (EJF, November 2023), https://ejfoundation.org/resources/downloads/Ghana-prosecutions-fisheries-violations-briefing-v2.pdf.

The common coastal fisheries conflicts in West Africa are between industrial fishers and small scale / artisanal fishers (SSF). There are also documented cases of conflicts between only SSF and cases between only industrial fishers, but those conflicts are less frequent. Conflict occurs between industrial fishers and SSF in West Africa for reasons such as:

I. Illegal, unreported, and unregulated (IUU) fishing
II. Fisheries management
III. Spatial overlap, such as during transit to and from port
IV. Non-fishing ocean-based economic activities, such as oil and gas extraction limiting traditional fishing zones

I. **Illegal, unreported, and unregulated (IUU) fishing:** A large proportion of fisheries conflict arises over competition for limited resources within their coastal waters, especially between industrial and SSF. In Ghana and Liberia, they established the Inshore Exclusion Zone, which limits fishing to SSF with a few exceptions such as for some semi-industrial fishing activities.[58] These restricted zones in theory are able to mitigate a lot of conflict for resources in their waters, but often due to a lack of oversight and enforcement of laws (II) industrial fishers will fish in these exclusion zones and leave less fish for the SSF. These SSF rely heavily on catching from the dwindling stocks within these restricted zones for their daily sustenance. Thus, the SSF are sometimes forced to fish outside their exclusion zones and face dangers of collision with industrial vessels and are at an increased risk for the destruction of their fishing equipment & boats, along with an increased risk of injury and death.[59]
II. **Fisheries management:** Ghana, Senegal, and Liberia all have robust laws and regulations to manage their fisheries and mitigate conflict between industrial fishers and SSF. The largest challenge they are facing now is a lack of enforcement of these very policies. This happens because of various factors such as:
    A. A lack of knowledge about the rules and regulations at all levels, from the SSF, to the industrial fishers, the courts, and the law enforcement agencies themselves.
    B. Varied preferred platforms of conflict management. Conflict management between SSF is often managed locally, based on customary law. In Ghana, conflicts between industrial fishers and SSF will lead to the industrial fishers taking the case to formal courts, where the SSF often have little knowledge of the non-local ways of conflict resolution.
    C. Corruption within legal systems in these countries. Corruption within the West African fisheries is inhibiting the fair distribution of resources and the protection of SSF's rights, among other factors. Industrial actors have been found to pay off

[58] Godfred A. Ameyaw et al., "Challenges in the Management of Small-Scale Marine Fisheries Conflicts in Ghana," *Ocean & Coastal Management* 211 (October 1, 2021): 105791, https://doi.org/10.1016/j.ocecoaman.2021.105791; Asare, interview.
[59] DuBois and Zografos, "Conflicts at sea between artisanal and industrial fishers: Inter-sectoral interactions and dispute resolution in Senegal."

the authorities in order to get lighter punishments.[60] SSFs often do not have the resources or knowledge to be able to fight the industrial fishers in the formal courts, and so the industrial fishers can often escape any punishment at all. These formal conflict resolution systems were found to favor industrial fishers in Senegal because often the SSF do not have registration for their boats, are rarely insured, and do not have required safety navigation gear so the Senegalese courts will often side with the industrial actors.[61]

D. Failure to implement co-management systems. Liberia and Ghana both have robust laws of co-management set up to help manage local fisheries and their conflicts, but struggle with implementation.[62] This stems from a lack of long-term support from the government, both financial and structural, and a failure of cooperation between the co-management leadership and the fishers.

III. **Spatial overlap, such as during transit to and from port:** Spatial conflicts are also noted to be a driver of conflict between industrial and SSFs. Spatial conflicts arise when industrial fishers and SSF are in the same area. This could be the industrial fishers traveling through the restricted zones, or near ports where industrial fishers and SSF overlap.[63] These conflicts can be due to exceptions within the law, such as in Ghana where some industrial fleets are allowed to fish in the restricted zone, and the perceived law-breaking leads to increased conflict and more confusion for law-enforcement on which industrial vessels are allowed to fish in the restricted zones.

IV. Non-fishing ocean-based economic activities such as oil and gas extraction limiting traditional fishing zones: Conflicts also arise between the non-fishing industrial sector and SSF such as when oceanic oil and gas extraction restricts traditional fishing zones that the SSF have historically used, and instead begins conflicts over the right to fish.[64]

Conflict mitigation strategies

I. Combat IUU fishing through better enforcement of zoning laws
   A. Enforcement of existing zoning laws will decrease conflicts and overlaps between industrial fishers and SSF.

II. Programs to teach locals, officials, and judicial members the law of the land

[60] GNA, "Fisheries Crimes and Prosecution."
[61] Carolyn DuBois and Christos Zografos, "Conflicts at Sea between Artisanal and Industrial Fishers: Inter-Sectoral Interactions and Dispute Resolution in Senegal," *Marine Policy* 36, no. 6 (November 1, 2012): 1211–20, https://doi.org/10.1016/j.marpol.2012.03.007.
[62] "Taking Stock: Documenting the Effectiveness of Co-Management Practice…," Environmental Justice Foundation, accessed May 17, 2024, https://ejfoundation.org/reports/taking-stock-documenting-the-effectiveness-of-co-management-practice-in-liberia; Asare, interview.
[63] Katherine L. Seto et al., "Evidence of Spatial Competition, over Resource Scarcity, as a Primary Driver of Conflicts between Small-Scale and Industrial Fishers," *Ecology and Society* 28, no. 1 (January 1, 2023), https://doi.org/10.5751/ES-13650-280106.
[64] Ameyaw et al., "Challenges in the Management of Small-Scale Marine Fisheries Conflicts in Ghana."

A. Government intervention and/or private sector partnerships to inform key stakeholders at all levels of the established laws and regulations will allow for fairer and consistent enforcement of the law.

III. Increase government support for co-management systems
    A. Co-management systems allow for fairer systems of conflict resolution between all actors, along with an increased involvement of the SSF in fisheries management. Increasing government support, both financially and structurally, will allow for the successful co-management systems to function in the long-term.

IV. Clarification of laws, reduce exceptions.
    A. A reduction of exemptions for the zoning laws will decrease confusion for both regulators and all fishers on who is allowed and not allowed to fish.