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Chapter 17

Transdisciplinary Engagement to Address Transboundary Challenges for Small-Scale Fishers



Joeri Scholtens, Andrew M. Song, Johny Stephen, Catalina García Chavez,
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Abstract Small-scale fisheries and their governance are increasingly affected by natural, social, and political issues that originate outside their immediate control and locality. This chapter explores how researchers, non-governmental organizations (NGOs), and fisher organizations can collaborate in the pursuit of empowerment small-scale fisheries vis-à-vis such ‘external’ dynamics, with a focus on maritime boundaries. To do so, we first analyse how transboundary maritime issues complicate the operation and welfare of small-scale fishers and may further their marginalization. Second, we explore how transdisciplinary engagement can be key to better understanding and addressing such transboundary challenges. Taking an action-oriented approach, we analyse the opportunities and pitfalls of transdisciplinary collaboration to empower small-scale fishers through five types of

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intervention strategies: *capacity building* (strengthening fisher organizations), *institution building* (building bridges between disparate actors), *discourse* (reframing the nature of the problem), *law* (appealing to national or international courts), and *mobilization* (mobilizing fishers to confront power). Each type of intervention is illustrated with a case study from various parts of the world. We argue that despite potentially conflicting incentives, interests, and accountabilities, transdisciplinary engagement can be both a meaningful and effective practice to empower small-scale fishers vis-à-vis transboundary challenges.

Keywords Transboundary · Transdisciplinary · Maritime boundaries · Empowerment · Interventions · Small-scale fishers

17.1 Introduction

Small-scale fisheries and their governance are increasingly connected to natural, social, and political trends that originate outside their immediate control and locality. To better understand small-scale fishers' influence on such 'external' dynamics, or the lack thereof, we must explore cross-sector, cross-scale, and cross-boundary linkages. In this chapter we take on this challenge, with 'boundaries' as the focal point of our discussion.

The seas are replete with boundaries, mostly indiscernible in the physical sense but drawn on paper in the course of recent decades with aims to improve maritime governance (e.g. Exclusive Economic Zones, Large Marine Ecosystems, marine spatial planning, and Marine Protected Areas - MPAs). Song et al. (2017) have highlighted the paradoxical implications of boundary proliferation at sea: because marine ecosystems and fishers, due to their fluid and mobile nature, do not mould themselves easily to physical borders, more boundaries in the water have actually exposed more *transboundary* fishing practices. Drawing boundaries thus inevitably leads to more transboundary movement. Concomitantly, this phenomenon has also given rise to a vast body of transboundary fisheries research, as well as to efforts of state- and non-state actors to govern such transboundary movements (see Song et al. 2017 for details).

The purpose of the chapter is twofold. First, we aim to understand how transboundary maritime issues complicate the operation and welfare of small-scale fishers and ask whether and how transboundary dynamics may further the marginalization of small-scale fishers across the world. For example, there are disputes over international maritime boundaries or with transboundary fishing fleets, which can work to restrict fishing operations. Small-scale fisheries may also be negatively impacted by newly established MPA boundaries, or—more subtly—by emergent international conventions, guidelines, discourses, or regulations.

Second, this chapter aims to explore the relevance of transdisciplinary collaboration between academics and non-academics for understanding and addressing transboundary issues. Such collaboration can occur in various stages of knowledge-action production, including agenda-setting, knowledge coproduction, and collaborative interventions. In this chapter, we focus on the latter and take an action-orientated

approach, focusing on collaborations between researchers, NGOs, practitioners, and fisher organizations in an effort to empower small-scale fisheries through various intervention strategies. In doing so, we hope to provide a reflection on the possibilities for and the necessity of such transdisciplinary engagement in addressing some urgent transboundary fisheries problems. Our argument is also that transdisciplinary collaboration can provide useful insights for improving transboundary interactions of small-scale fisheries. Discipline is a type of boundary after all. As knowledge (and experience) domains that pertain to small-scale fisheries are in reality fluid and plural, involving multiple disciplinary perspectives and bridging between academics and non-academics, using principles such as cooperation, multi-scalar linkages, empathy, reflexivity, and attention to power (Lang et al. 2012; Polk 2015), constitutes a significant transboundary endeavour.

This chapter is structured as follows: we commence with an overview of transboundary fisheries issues, and identify a range of challenges that arise for small-scale fisheries. We follow with a discussion about the potential of transdisciplinary work to empower small-scale fishers. We subsequently synergize these two discussions to highlight five types of transdisciplinary interventions that can help address transboundary challenges encountered by small-scale fishers, and illustrate those with brief case examples.

17.2 Transboundary Challenges for Small-Scale Fishers

Transboundary issues abound in contemporary fisheries. Even if we limit our definition of ‘boundary’ to the spatial domain (that is, lines on a map depicting division of water surfaces and columns for various governing purposes), we observe many kinds of boundaries in oceans and inland waters alike. For example, boundaries are used to delineate marine protected areas, exclusive economic zones, and large marine ecosystems. Subsequently, we also identify many inadvertent and intentional crossings of these boundaries by numerous social, biological, and oceanographic components such as fishers, boats, currents, and fish themselves. ‘Transboundary’ has, therefore, become a salient topic these days for research and practice (Song et al. 2017). We define a transboundary perspective to be an approach that examines the effects of boundary-setting and provides ways to reconcile or transcend the limitations of static and rigid spatial demarcation for fisheries management (Song et al. 2017).

Transboundary events in fisheries can intersect with the *modus operandi* of small-scale fisheries in, at least, four ways. First, because target resources move across boundaries, such boundaries may create intensified competition and conflicts between fisher groups positioned on alternate sides. Determining optimal and cooperative harvesting strategies, as well as conservation measures becomes an important consideration. Secondly, many fishing strategies are of a mobile nature, and, therefore, it is common to see fishers and boats travelling across boundaries. Migrating, temporary, and visiting fishers (whether legal or illegal) interact with

local ones, which may push those with more primitive gear or less established political connections to the margins. Because of their strategic position and movement near boundaries, small-scale fishers have also been implicated in the geopolitical wrangling of high-level boundary disputes among states (Song 2015; Roszko 2015). Thirdly, as sale of fish and seafood to other jurisdictions is common, trade is often transboundary. Many small-scale fishers engage in the inter-country and even inter-continent trade of their catch. They are, therefore, increasingly subject to, and become vulnerable to, sometimes forceful trade rules, tariff restrictions, price fluctuations, and import food safety standards (Purcell et al. 2017). Lastly, small-scale fishers may be invited as participants in the governance discussions or negotiations about how to more effectively and cooperatively manage transboundary fisheries. This is a positive step that could increase their visibility and enable a fairer treatment. However, there is also a danger that they are used as a bargaining chip or become a token presence in order to achieve gains in other sectors (Scholtens 2016b).

From this general description of the different avenues through which transboundary issues may impact small-scale fishers and small-scale fisheries, we further examine three specific challenges that draw upon geographical concepts: scale, politics, and sovereignty.

17.2.1 Scalar Mismatches and Institutional Fragmentation

Very common in the governance of transboundary fisheries is a mismatch “between the geographic scale of ecosystem functioning and the spatial extent of the institutional arrangements managing such a system” (Duraipappah et al. 2014). According to Berkes (2010, 236) this “gross misfit of [...] scales is one of the fundamental reasons why management often fails.” Institutional scale may disagree not only with ecosystem scales, but in the case of transboundary fisheries, also with the spatial range of the fisheries activity (Scholtens and Bavinck 2013). Van Tatenhove (2013, 300) employs the term ‘institutional ambiguity’ to describe such “mismatch between the institutional settings and the specific territorial locations ... where [fishers] operate.” Berkes (2010, 236) argues that seeking an exact fit between the two systems may often not be very realistic given the highly dynamic and mobile nature of both fish stocks and fishermen. Rather, mismatches need to be addressed by having appropriate interactions, both horizontally (at a single level) and vertically (between levels), as only then can various overlapping jurisdictions coordinate efforts (Scholtens and Bavinck 2014).

While scalar mismatches are thus common, the added problem with transboundary fisheries issues is the involvement of multiple governments (including defence, fisheries, and foreign affairs ministries), transnational private sectors companies, multiple fisher groups, as well as international organizations, generating a highly

fragmented institutional and legal arena. Institutional arrangements may include both international laws and guidelines, bilateral agreements, state law, and community law, as well as customary norms, none of which enjoy exclusive authority over fishing grounds (Scholtens 2016b). This not only challenges governability, or the capacity for governance, but the resulting legal ambiguities may also work to disadvantage small-scale fishers (even though occasionally they can also provide an advantage).

17.2.2 Sovereignty and Geopolitical Issue Linkage

Maritime boundaries are inevitably tied to vital state preoccupations such as sovereignty, security, and defence. When small-scale fishers operate across boundaries, or are affected by other transboundary fishing operations or regulations, they become easily encapsulated in political calculations that range far beyond fisheries. In such cases, small-scale fisheries governance thus becomes entangled in national or higher level political processes that have little to do with fisheries per se. Constituting just one of the many issues in international relations, transboundary fisheries conflicts have been frequently used as a pawn in regional geopolitics (Mitchell 1976; Dupont and Baker 2014). In such a situation, transboundary fisheries become subject to issue linkage, in other words, “the simultaneous discussion of two or more issues for joint settlement” (Poast 2012, 278), in which fisheries concerns end up being linked with unrelated bilateral issues into a package deal. Examples in the literature abound. The Sri Lankan government has repeatedly released Indian trawlers that were caught poaching in its waters to appease its big neighbour, despite opposition of small-scale fishers whose operations were devastated by those trawlers (Scholtens and Bavinck 2014). Chinese fishers have been used as subsidized pawns to display territorial claims of the Chinese state, to the frustration of Vietnamese fishers (Roszko 2015). Song (2015) demonstrates how fishers are used by the South Korean state to represent its geopolitical agenda and reinforce its objectives of boundary legitimization. Such examples show that small-scale fishers can be employed for an instrumental or ideological gain in a larger game of geopolitical swagger (Roszko 2015; Song 2015).

It must be said that issue linkage is not necessarily a negative phenomenon and may sometimes be used to solve stalemates in bilateral negotiations (Warner 2016). However, with small-scale fishers typically having a poor representation in those negotiations, their interests are easily compromised for national interests that are often better protected and conveyed.

17.3 Empowering Fishers Through Transdisciplinary Collaboration¹

The question, now, is how can these transboundary challenges be linked to the empowerment—or the increase of collective influence—of small-scale fishers, and what can we gain from transdisciplinary engagement? That is, what types of interventions are required to address these transboundary challenges faced by small-scale fishers, and what is the role of transdisciplinary collaboration therein? To address these questions we first need to clarify what we mean by empowerment.

Empowerment can be understood as a process or an outcome, and as a goal in itself, or rather valued instrumentally for achieving other ends (Jentoft 2005). In this chapter, we understand empowerment as the process of improving resource access of marginal users, with access defined as the ability to benefit from resources (Ribot and Peluso 2003). To understand the nature of empowerment processes, Mohan and Stokke (2000) draw a useful distinction between two approaches labelled revisionist neoliberal and post-Marxist. From the first perspective, empowerment entails a harmonious process of building bottom-up organizational structures. Here, empowerment has the potential of a win-win situation, which can be achieved through multi-stakeholder deliberations, with the assumption that bringing about positive change for marginal groups can take place within existing power structures (Mohan and Stokke 2000). The second perspective understands empowerment as social mobilization that challenges hegemonic interests within the state and the market (Mohan and Stokke 2000, 249). From this perspective, empowerment is a conflictive and potentially zero-sum game that cannot occur without disempowerment; “those who are being empowered are doing so at someone’s expense” (Jentoft 2005, 2). This perspective stresses that marginalization is produced by often contentious socio-political interactions and that empowerment is therefore a relational phenomenon.

In terms of empowering small-scale fishers for gaining resource access, the difference between these two approaches is significant. A harmonious approach to empowerment may entail building institutional capacity among fisher organizations and facilitating the negotiation of collective outcomes with competing resource users. An antagonistic approach may rather entail confronting exclusion, inviting public protests and challenging rights and discourses that privilege dominant resource users (Fowler and Biekart 2013).

Each type of empowerment provides different opportunities and challenges for transdisciplinary collaboration. We define transdisciplinary collaboration here as a form of collaborative action between practitioners, NGOs, fisher organizations, academics, and possibly even governments, in different possible constellations. As explained in the introductory chapters of this book, transdisciplinary collaboration is appealing for many reasons, and few people would be outright opposed to it. Yet, it has a range of potential vulnerabilities and limitations and should not be

¹The arguments made in this section build upon Scholtens and Bavinck (forthcoming).

romanticized. For example, interests, incentives, accountabilities, values, and epistemologies can differ markedly between scholars working for universities and professionals working as activists and non-activists for NGOs or representative organizations. Stereotypically, academics are primarily interested in understanding change, whereas practitioners and policy-makers rather want to enact change. “In a caricatured way, both groups [researchers and practitioners] are prone to develop images of each other: to the researcher, the operator may be vain, and naïve as the target set out in plans is missed; to the operator, on the other hand, the researcher may well be independent but equally insignificant and of little proper use” (Lund 2010, 22).

From a researcher’s perspective, collaboration with civil society organizations and fisher representatives may be valuable to formulate more demand-driven questions, gain access to valuable insider information, engage in action research, ensure impact of one’s research, possibly add new or better questions, and perhaps, most importantly, add a significant element of accountability. Yet, scientists may also be concerned with losing scientific integrity by taking position and engaging in action. Transdisciplinary collaboration may also lack the necessary alignment with scholars’ theoretical research interests, and their questions may be considered irrelevant from a practitioner’s point of view. For practitioners, collaboration with researchers may be helpful to acquire data to inform, support, or legitimize an action plan. Cooperation with universities may also be useful to have access to a certain form of authority and networks. In addition, academic research may be useful to reflect on and improve intervention strategies, and allow to challenge assumptions and scrutinize NGO practices. Yet, collaboration with academics can also pose major frustrations in terms of having different time horizons, publication requirements, and obsession with ‘neutrality’ and ‘objectivity’.

17.4 Addressing Transboundary Challenges Through Transdisciplinary Collaboration

Below we elaborate on a variety of strategies that transdisciplinary consortia can engage in to tackle small-scale fisheries challenges of transboundary nature. For the purpose of this chapter, we identify five possible types of intervention strategies (which are not necessarily exhaustive) on the basis of the authors’ own experience with transdisciplinary work. They are capacity building interventions (e.g. strengthening fisher organizations), institutional interventions (e.g. building bridges between disparate actors), legal interventions (e.g. appealing to national or international courts), discursive interventions (e.g. reframing the nature of the problem), and mobilization interventions (e.g. mobilizing fishers to confront power). Each of these strategies has its own strengths and weaknesses, and obviously different contexts require their own mix of approaches. Different types of organizations also tend to favour different types of interventions; while some may consider building social movements the only way to confront social exclusion, others may consider such interventions harmful and blocking potential avenues for constructive engagement.

17.4.1 Capacity Building Interventions – Let’s Organize

Transboundary negotiations can be overly complicated and generally not very transparent. Laden with political interests, any meaningful involvement might seem discouraging and time-consuming to small-scale fishers. Capacity building of fishers is a widely articulated strategy of promoting empowerment and reducing marginalization, seen as necessary for promoting their participation in transdisciplinary dialogues for finding innovative solutions. It is arguably the core assertion of the systematic, harmonious view that aligns with the mainstream practices and theories. Many small-scale fishers do not have the capacity or continued interest to participate in transdisciplinary collaboration. Engaging across (international or management) boundaries can also be particularly challenging and may require an added set of capacities to be able to negotiate with those positioned on the ‘other’ side of boundaries (see Box 17.1). Hence, appropriate training and necessary support that encompass awareness of potential regulatory, cultural, and ecological differences across boundaries, as well as use of positive, empathic language would be desired. At the same time, the transdisciplinary fisher-scientist collaborations themselves can further enhance confidence, networking, lobbying, decision making, and adaptive capability of the fishers. In addition to capacity building at the level of an individual, there is also empowerment at the level of collectives and institutions that must happen. For that, fishers need to re-structure themselves into an organized group to better represent their interests. Coping with the unpredictability of transboundary fisheries, striving to locate mutually-agreeable solutions through transdisciplinary initiatives such as co-management (Jentoft 2005), and dealing with politics of scale to productively engage with distant and high-level political and economic forces would all require, as the first step, organized and enhanced capacity on the part of the fishers and others involved.

17.4.2 Institutional Interventions – Let’s Build Bridges and Linkages

Institutional interventions aim to improve the quality and capacity of institutions dealing with or affecting small-scale fishers, in particular the coordination and functional linkages between institutions. As mentioned above, in transboundary contexts there are frequent institutional mismatches, for example, resulting in the inability of a fisheries authority to control a fishery in its jurisdiction because of its highly mobile transboundary nature. Local or national institutions may also be unable to respond to rapidly changing international fish markets or fishing techniques (Berkes 2010). Improving coordination between formal and informal institutions at different levels of scale, mobilizing different forms of knowledge, and involving both state- and non-state actors are considered important from this point of view (Kooiman et al. 2005; Fanning et al. 2007; Berkes 2010).

In the context of transboundary conflicts, in cases where conventional inter-state diplomacy is hampered or has come to a standstill, NGOs may engage in more

Box 17.1 Building Capacity of Fishers to Look Beyond Boundaries

Many tropical island nations face concerns of food insecurity with a high proportion of rural households relying on fisheries for food and income. However, the nearshore reefs and lagoons that surround many of these islands accessed by small-scale fishers are considered to be heavily fished. Resources traditionally harvested in these relatively shallow and close-to-shore areas, including trochus, reef fish and sea cucumber, can no longer be consistently relied upon to support livelihoods, necessitating a relieved fishing pressure and a time for a stock recovery (e.g. through closed seasons or protected areas). As part of securing alternative fishing options for small-scale fishers, NGOs and researchers are working together with national fisheries departments and regional organizations, such as the Pacific Community, to operationalize offshore fish aggregating devices (FADs) that give coastal communities affordable and safe access to oceanic, pelagic species, such as tuna and mackerel.

For example, in Timor-Leste, where fishers typically use outrigger canoes and small motor boats, they are limited by the distance they can travel. In Atauro Island, nearshore fringing reefs drop off quickly to great depths of up to 3000 meters, posing an operational boundary for these fishers. Importantly, in facilitating to go beyond these tacit boundaries, the technical transfer of FADs is being promoted under the auspices of community-based management (or traditional management system called *tara bandu*), which encourage direct involvement of local communities and building their technical and organizational capacity. Similarly, in Vanuatu, FAD development is part of the community's overall fisheries management plan. In collaboration with the Vanuatu Fisheries Department, a FAD Management Committee is set up in the target villages to implement the community FAD guidelines on various aspects, including FAD access rules and fees, gear restrictions, catch-and-effort monitoring, and maintenance of the FADs. Fishers are also trained on using vertical longlines for catching pelagic fish and squid, and five new trolling gear types. In this way, FADs provide a vehicle for capacity building and community organization as well as integration of different groups and disciplines in order to expand fishing possibilities beyond nearshore environments.

Sources:

<http://blog.worldfishcenter.org/2017/06/against-the-tide-a-fad-fit-for-timor-lestes-artisanal-fishers/>

<https://www.worldfishcenter.org/content/communities-tackle-coral-reef-sustainability-timor-leste>

<http://www.spc.int/fame/fr/projets/devfish2/193-nearshore-fad-support-to-atauro-island-timor-leste>

Amos et al. (2014).

informal and possibly creative forms of transboundary collaboration or conflict resolution. This so-called ‘track-II diplomacy’ may cut through the red tape of conventional diplomacy and be more creative, being less bound by formal procedures. “Track II offers a ‘bottom up’ [...] approach in contrast to the top down, mediated solutions often touted in the past. In this process, NGOs who have become deeply embedded in societies can act as facilitators and conduits, that is as agents who make productive exchange among players possible and who provide ‘ground truth’ to governments and other interested parties” (Kelleher and Taulbee 2017, no page number). In other words, transboundary conflicts may well be served by collaboration between fisher organizations and broader civil society actors, possibly supported by researchers, for example, to benefit from the legitimacy they may enjoy with state authorities (see Box 17.2).

17.4.3 *Discursive Interventions – Let’s Reframe*

Scientists and policy-makers tell each other stories of what fisheries are, what problems they face, and what issues are real and deserving. These narratives typically frame victims and villains, problems and solutions, and causes and effects. They are also continuously challenged and never permanently fixed. Fisheries management jargon is rich in such narratives, and some of them implicitly undermine the viability and relevance of small-scale fishers. For example, the narrative of Malthusian overfishing suggests there would be too many fishers out there chasing too few fish (Pauly 1994; Finkbeiner et al. 2017); the tragedy of the commons narrative frames fishers as non-communicative resource exploiters in need for stringent regulation, while narratives of ‘wealth based fisheries’ and ITQs give implicit preference to economic efficiency and ‘fisheries rationalization’ over socially equitable outcomes (Cunningham et al. 2009; Pinkerton 2017). Over the course of past decades, with ample technical (development) cooperation to train southern scholars and prospective managers in ‘modern fisheries management’, these narratives have, in the course of globalization, moved across boundaries and resulted in a global expert consensus (Thorpe and Bennett 2001).

These mainstream narratives can, however, be effectively deconstructed by scholars and practitioners in order to reveal how they were constructed in the first place and what interests they serve. While dominant discourses typically represent vested interests and may, therefore, be highly resilient to change, alternative- or counter-narratives can be and are developed as well. Such deconstructing, challenging, and reframing of dominant narratives that misrepresent small-scale fishers’ interest lend themselves particularly well to transdisciplinary collaboration. Challenging discourses requires persistence and strong collaboration with media to affect not only policy but also shape wider public opinion. Another key stumbling block to changing the discourse is how wedded scientists are to their particular discipline and affiliated methodological approaches. Transdisciplinarity requires us to go beyond collaboration across disciplines and also involves societal groups in the framing of the research problems, the co-production of knowledge, and the framing of solutions (see Box 17.3).

Box 17.2 Transboundary Dialogues for Change

Despite the existence of a maritime boundary between India and Sri Lanka, the overcapitalized trawler fleet of Tamil Nadu has a long history of targeting the rich Sri Lankan fishing grounds. The grounds had become particularly attractive as north Sri Lankan fisheries had collapsed as a result of the devastating civil war raging in the country from 1983 to 2009. From 2010–2016 a project called REINCORPFISH worked with a group of academics, NGOs, and fisher organizations from both sides, aiming to transform this transboundary fisheries conflict.

The transdisciplinary consortium took a bottom-up approach. It reasoned that since fishers from both sides shared a common language and a Tamil ethno-political identity, there may be fertile ground for a transboundary dialogue between fisher representatives from both countries. In 2010, the consortium organized so-called fisher-to-fisher dialogues, which were initially met with cautious support from both states. After a week of intense dialogue and debate, the two groups of fishers reached a promising agreement, stipulating that Indian trawl fishers would terminate trawling in Sri Lankan fishing grounds after a transitioning period of 1 year; during the transition period, trawlers would be allowed to continue fishing in a limited section of Sri Lankan waters for a total of 70 fixed days.

The Sri Lankan government, however, soon rejected the fishers' proposal and subsequently started to oppose the dialogue process, arguing that the transboundary fishing conflict was an issue for the two governments to solve. It accused the NGO for hand-picking fisher delegates to suit its own political needs, and for buying into the logic of 'sharing waters' with India, thus undermining Sri Lanka's territorial integrity. While the organizers of the dialogue viewed the issue mostly from a livelihoods and fisheries management perspective, for the Sri Lankan government sovereignty and security were the primary framing. The backlash also reflected a larger tension between the post-war authoritarian Sri Lankan regime and rights-based NGOs in Sri Lanka. The lack of government support on both sides allowed Indian fishers not to adhere to the agreement, and to continue trawling in Sri Lankan fishing grounds. What became clear from this initiative is that collaboration between academics, NGOs, and fishers can in principle be fruitful to address transboundary challenges by facilitating creative (interim) solutions, but also that such initiatives are fragile as they rely on endorsement and support by respective governments to bear fruit. This is particularly difficult to achieve since transboundary issues can easily flame a range of state anxieties.

Sources: Stephen et al. 2013; Scholtens and Bavinck forthcoming.

Box 17.3 Reframing Transboundary Fishing as IUU Fishing

Transboundary fishing activities can be framed in various ways. While fleets operating illegally or semi-legally in distant or foreign waters may be variously called pirate fishers or roving bandits, they are increasingly termed with the relatively new name of ‘IUU fishing’. The phrase Illegal Unregulated and Unreported (IUU) fishing was introduced by the FAO in 2001 and gained momentum in 2010 when the EU adopted a far-reaching policy to combat IUU fishing practices across the world. This policy includes the possibility to unilaterally ban seafood exports to the EU by countries that it identified as non-cooperative in the fight against IUU fishing.

In the Palk Bay case (as introduced in Box 17.2), the transboundary operations of the Indian trawler fleet in Sri Lankan waters have for many years been subject to intense and enduring struggles by Sri Lankan fishers and various supporters from broader civil society. How to frame this conflict between fishers in two countries has always been an important and contested issue in these struggles. Framings used by Sri Lankan actors varied widely, but revolved around ‘an intrusion to Sri Lanka’s sovereignty’, ‘an injustice incurred on Sri Lanka’s fishers’, or ‘an unsustainable act of destruction to the fragile Palk Bay ecosystem’, while competing with the Indian framing that the entire Palk Bay belonged to its traditional fishing grounds and the maritime boundary line was illegitimate in the first place.

Interestingly, in 2012 a group of activists in Sri Lanka mobilized lawyers, fisher leaders, and the media to again tackle the same transboundary intrusion, but this time reframing it as an act of ‘IUU fishing’. The transboundary trawler intrusions indeed qualify by all means for the nomenclature IUU fishing, being both unregulated and illegal going by Indo-Sri Lankan bilateral agreements. This new framing not only approached the problem from a different angle, but also opened up a new political arena by bringing new actors—most notably the Indian seafood export sector and the European Union—into the equation. The framing of India being engaged in ‘IUU fishing’ in the Palk Bay effectively internationalized an otherwise bilateral issue, alluding to a politics of scale where civil society actors bypassed the Sri Lankan State and appealed to the EU, thus putting indirect pressure on India by exposing its illegal fishing activities, and potentially making Indian fish exporters nervous (with a threat of a ban on Indian fish exports to the EU). While the EU responded that it wished not to interfere in this ‘bilateral issue’, the new framing had been quite effective in steering up the debate and putting a novel form of pressure on India. The use of the IUU framing, however, comes with its own perils. Not only is the internationalization of domestic or bilateral issues a risky affair that can take unpredictable turns, the action taken by activists in Sri Lanka can also be read as endorsing a western hegemony in setting international fishing standards.

Source: Scholtens 2016b; Stephen et al. 2013.

Box 17.4 Demanding Justice from the Court in the Colombia-Nicaragua Boundary Dispute

Within the international framework of UNCLOS, the resolution of maritime boundary conflicts is supposed to take into consideration equity concerns, the interest and needs of the states as well as the conservation of the marine environment (UNCLOS, Art. 59). Based on these principles, in 2012, the International Court of Justice (ICJ) announced its decision regarding the maritime border conflict between Nicaragua and Colombia, which redrew the maritime boundary such that it now came to be positioned 200 nautical miles from the Nicaraguan coastline. This implied an abrupt loss for Colombia of a 75,000 km² sea area. This resolution subsequently spurred a range of unforeseen conflicts. These included hostile treatment of Colombian vessels and fishermen by Nicaraguan authorities, a lawsuit against Colombia for not abiding by ICJ's decision and violating Nicaraguan sovereign rights, alerts from environmental NGOs and activists regarding the risks for the Seaflower Biosphere Reserve, and claims from the island's inhabitants who objected to how the decision had taken away their ancestral territory and infringed their livelihood rights.

In response to the multiple unexpected effects of the newly drawn maritime boundary, the Native National Authority (NNA, a group of Colombian community leaders from San Andres and Old Providence Islands elected to represent and defend the wellbeing and the future of the *raizal* ethnic group) devised a two-pronged strategy. First, they tried to informally negotiate a joint solution with governmental representatives and fishermen from Nicaragua in order to preserve their traditional activities in the contested area by establishing common fishing zones and trade route agreements. Second, in 2014 the NNA community leaders started collaborating with the University of Medellín to take the issue to court. According to Estrada Vélez, the professor and lawyer who joined the initiative of the community leaders, this unique collaboration followed from his conviction that “academics must be a means of social transformation and human rights defense.”

They jointly sent a note of protest to the ICJ, and presented a lawsuit against those articles of the Colombian Constitution that dictate the government to abide by ICJ rulings. These actions challenged the constitutionality of the ICJ judgment, arguing that, first, it “suffers from a structural deficiency by not allowing voice, participation or recognition of indigenous people” (Gaviria Liévano 2014, 182), and, second, the two states had been too narrowly concerned with defining their respective sovereign rights and delimiting what they considered to be their territories, while violating the rights to ancestral property and food security, and producing harmful economic, ecological, and social effects on the archipelago (Centro Colombiano de Estudios Constitucionales 2017).

(continued)

Box 17.4 (continued)

While at the time of writing the ICJ has not yet taken a final decision, the joint action undertaken by the fisher community leaders, academics, and lawyers resulted in a partial victory in late 2017. The ICJ announced that it accepted the counterclaim concerning Nicaragua's infringement of the customary rights of the San Andrés Archipelago inhabitants to access and exploit their traditional fishing grounds.

Sources: Gaviria Lievano (2014); Centro Colombiano de Estudios Constitucionales (2017); UNCLOS (1982).

Flyvbjerg et al. (2012) brings the argument one step further, by arguing that this work of reframing is in fact one of the key roles for social scientists. He suggests to focus on 'tension points', in other words, issues in which power relations "are particularly susceptible to problematisation and thus to change, because they are fraught with dubious practices, contestable knowledge and potential conflict. Thus, even a small challenge – like problematisation from scholars – may tip the scales and trigger change..." (Flyvbjerg et al. 2012, 288).

17.4.4 *Legal Interventions – Let's Appeal*

Transboundary fisheries movements of fishers, as well as the stipulation of international maritime boundaries themselves, are typically regulated in one way or another by national, bilateral, or international laws and agreements. These may be domestic regulations prohibiting or permitting foreign fishing fleets to operate in one's EEZ, high-level guidance such as the 'Voluntary Guidelines for Sustaining Small-Scale Fisheries' as adopted by the FAO member states in 2015 (FAO 2015), or the UNCLOS providing a measure of multilateral consensus for the equitable sharing and effective management of oceanic resources. Many ocean spaces are subjected to a multiplicity of potentially conflictive rule systems, leading to situations of legal pluralism, where stakeholders may end up 'forum-shopping' for the solution that fits their interests best. Legal interventions on behalf of small-scale fisheries become relevant when the problem at stake stems from an unwillingness or inability on the part of the authorities to enforce existing regulations, agreements and guidelines that are potentially protective of small-scale fisheries.

Small-scale fishers' activities have been frequently obstructed by illegal or semi-legal interventions that include displacements, dispossession of land or resource access, or the ignorance of historical or ancestral rights. Sometimes these processes have been called ocean or coastal grabbing (Bennett et al. 2015; Bavinck et al. 2017), even though such involuntary transfers of ownership are not necessarily illegal. In such scenarios, when objections, attempts at consultations and other admin-

istrative procedures fail, appealing to the court can be a strategy of last resort. Dealing with the court requires its own type of transdisciplinary collaboration between lawyers, fisher organizations, and possibly also academics. Especially when international courts become involved, fishers may require high-level national or international expertise to be able to frame their claims effectively (see Box 17.4).

Taking the legal route, however, has its limitations, also in cases where small-scale fishers clearly have the law on their side. While in an ideal world, legal systems operate independent of political systems, in many contexts and countries the courts and legal systems do not operate in a political vacuum. As Ribot and Peluso argue (2003), possessing the appropriate legal right to access fish resources does not always mean that one is *actually* able to benefit from those resources. In other cases, the law may itself be considered the source of disempowerment designed to disproportionately benefit (trans)national elites, rather than an avenue for obtaining and protecting the rights of vulnerable user-groups. In such cases, this would make the law itself a target of protest rather than a means of empowerment.

17.4.5 Social Mobilization – Let’s Fight

When governments are implicated in infringements on the rights of small-scale fishers, closing their eyes to misbehaving third parties, or are clearly in no mood to respond to legitimate concerns, collective mobilization can be a powerful strategy. For example, governments may ignore historical fishing rights, engage in shady joint ventures selling oceanic resources, facilitate or ignore coastal developments undermining small-scale fishers’ resource access, or simply displacing them altogether. In such cases, change may not be effectively pursued through dialogue and collaboration, but rather requires collective mobilization to challenge the status quo, and the building up of pressure in ways that authority holders feel compelled to respond.

There is a burgeoning literature that helps to understand under what conditions social movements may arise, fail, or succeed, the diversity of repertoires and strategies employed across time and space, the importance of leadership, resource mobilization, networks and alliances, as well as the vitality of timing in relation to political opportunities (e.g. Tilly 1993; Tarrow 2011). While this literature is rarely applied to small-scale fishers and their organizations, they certainly have a rich history of collective mobilization, whether organized at the local, national, or international level. For example, the Indian National Fisheries Forum booked a major success in getting foreign fishing fleets banned from Indian waters in the 1990s (Sinha 2012). Mobilization of fishers in South Africa against their exclusion from fishing rights led to significant change (Isaacs 2011). Fishers in Sri Lanka successfully mobilized against the introduction of sea planes (Kumara 2014), and less successfully against the illegal intrusion of Indian trawlers into their waters (Scholtens 2016a). The International Collective for the Support of Fishworkers (ICSF) and the

World Fisheries Forum (WFF) have played key roles internationally in pursuing this path of change to challenge injustices incurred on small-scale fishers.

Academics may not be the most obvious partner when it comes to social mobilization. They may rather shy away from open engagement with activism, fearing that it could undermine their respected positions as ‘objective’ and ‘neutral’ observers. This may complicate transdisciplinary collaboration and create distance and mistrust between scientists on the one hand and fisher activists on the other. Yet, a wide range of scholars—sometimes called activist-scholars or scholar-activists—consider their practice of science as inherently political and the problematisation of and mobilization against the status quo a key element of their *raison d’être*. In such cases, collaboration with scholars can be useful not only to provide a degree of authority and legitimacy to a cause, but also because they can provide and organize relevant knowledge. Beyond the individual scholar, some universities also have a rich history of functioning as platforms supporting popular mobilization and for ‘speaking truth to power’. In other cases, the role of academics may rather be more a supportive one of providing information, developing arguments, doing action research with fishers, and building an alternative narrative (see Box 17.5).

17.5 Discussion and Conclusion

This chapter has explored the potential for transdisciplinary collaboration between academics, NGOs, and fisher organizations in the pursuit of empowering small-scale fishers to deal with transboundary issues. In an increasingly globalized world, it is not an option to confine analysis of small-scale fishers to local affairs, as their viability is increasingly affected, if not undermined by forces originating at higher levels of scale. This chapter has thus focused on how transboundary issues have complicated the operation and welfare of small-scale fishers, and explored how different modalities of transdisciplinary engagement can be instrumental in addressing these challenges.

While transdisciplinary work is usually thought of as collaborative knowledge creation, this chapter has argued that it can also be understood as jointly engaging in action. We highlighted five types of interventions relevant for empowering small-scale fishers to deal with transboundary challenges. The type of intervention required is partly dependent on the nature of the transboundary problem at hand. Problems of institutional mismatch may be better served by governance interventions, while geopolitical issue linkages may rather require legal interventions. When fishers’ marginalization is the result of institutional ignorance or inadequate sharing of information, capacity building of fishers or state authorities, or advocacy work may be more relevant. When fisher rights are deliberately undermined, social mobilization or legal action may be required; in such situations empowerment has become a zero-sum game.

In reality, however, the distinction between the different types of interventions may be less clear-cut; they may well be combined and mutually reinforce one

Box 17.5 Partnerships Mobilize Fishers for Change in South Africa

The advent of democracy in South Africa in 1994, resulted in transformation of state institutions and society at all levels. Yet, despite a progressive Constitution, the interests of the fishing industry and the conservation community took precedent over addressing the rights of small-scale fishers. At about this time, fishers from Ebenhaeser and Papendorp, two villages located on the Olifants estuary on the west coast, approached researchers at the University of Cape Town (UCT) for assistance in ascertaining the reasons for the declining fish catches and challenging governments plans to significantly reduce fishing activities on the estuary. These fishers, who had been forced off their lands in the early 1920s and settled adjacent to the estuary, have been fishing in these waters for nearly 100 years. They regard the estuary as their traditional fishing grounds. Since 1993, a partnership between researchers at UCT and fishers of the Olifants estuary developed that sought to support fishers in their efforts to claim their rights, implement a community-based monitoring system, facilitate greater involvement of fishers in decision making, and oppose a government plan to phase out gillnetting, which would undermine their rights, livelihoods, and way of life (Sowman 2017).

However, in 2008, fishers at the Olifants estuary were confronted with a government proposal to declare a ‘no-take’ Marine Protected Area in the Olifants estuary. Building on the partnership with researchers at UCT, and two NGOs – Masifundise and the Legal Resources Centre – fishers were able to organize and mobilize around this threat to close the estuary. Fishers wrote letters to the Minister, threatened legal action, participated in protests, held workshops, and gathered data to challenge this proposal. One of the main obstacles to finding a resolution was the scientists’ conviction that a ‘no-take’ MPA was the only approach to address conservation concerns. After five years of community activism, research, and engagement with other estuary stakeholders, the fishers reached an agreement with all stakeholders that ensured the rights of fishers were respected but that conservation interests would also be addressed. This transformation process involved engaging in action research and dialogue amongst fishers, researchers, and other estuary stakeholders to determine estuary management proposals that were supported by the fishing community. Incorporating local perspectives and ecological knowledge in developing management proposals for the estuary were central in moving the narrative forward from a state centred, science-based approach to one that respected fisher rights and the role they play in stewardship of resources. The key factors that led to this outcome were (1) an enabling policy and legal environment that requires respect for human rights; (2) a robust partnership between fishers and civil society; (3) providing a ‘space’ that was conducive to discussion and deliberation amongst diverse governance actors; and (4) the presence of a respected process leader that recognized the importance of gaining input from all partners, and acknowledged the diversity of interests and knowledge as a resource, rather than an obstacle. This social learning process, although conflictual at first, led to transformations at many different levels and an outcome that was broadly supported.

Sources: Sowman 2009, 2017.

another. When small-scale fishers need to assert themselves vis-à-vis the state or corporate interests, a combination of institutional strengthening, reframing the problem by engaging with dominant public or scientific discourses, reaching out for dialogue to show a willingness to explore synergistic opportunities, resorting to legal action as well as outright mobilization and confrontation may be quite necessary. In the South African case, a combination of capacity building, dialogue, working with social partners, protest, and the threat of legal action proved crucial for gaining the necessary attention for the struggle of small-scale fishers and follow up action by the state. However, in other cases combining different approaches through one-and-the-same partnership can also be counterproductive. For example, in the case of the Palk Bay fisheries, the same partnership involved in facilitating the transboundary dialogue process also tried to mobilize fishers against the Sri Lankan government. The latter approach failed: the authoritarian government was keen to repress the NGO involved in organizing the protests, which subsequently also compromised the efforts of the same NGO to build capacity among fisher organizations and facilitate the dialogue process with Indian trawler operators.

The discussed intervention strategies are not exclusively relevant for addressing boundary challenges of course, nor are they exclusively applicable to fisheries. Yet, in this chapter we have tried to make a strong argument that the multiple transboundary challenges faced by small-scale fisheries are of such a character that they require broad based interventions, involving both academics, practitioners, NGOs, and fishers. Working in isolation will not work, for challenges are simply too complicated and demanding in their scope. This does not mean that collaboration between researchers and practitioners is always required for pursuing social and environmental justice in fisheries. The possible contribution of academics is highly dependent on context, the nature of the challenge at hand, and, simply, the courage or commitment of concerned individuals, and ranges from just a supportive one of providing information, to full-fledged collaboration with fishers to challenge status quo. Productive engagement between academics, fishers, and other civil society organizations, however, cannot be taken for granted; it needs to be carefully crafted, continuously fine-tuned in terms of mutual expectations and possibly conflicting priorities, incentives and modes of working. Just like any partnership, building trusting relationships and going beyond ad-hoc problem solving is key. And perhaps most challengingly, the accountability of all partners involved—fisher representatives, NGOs, and researchers—needs to be continuously tuned downwards towards actual fishers rather than to donors, research organizations, and bureaucrats.

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