International Journal of the Commons

Decentralizing the Governance of Inland Fisheries in the Pacific Region of Colombia

RESEARCH ARTICLE

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ubiquity press

ABSTRACT

In 1993, Colombia launched a decentralization process granting Black communities collective property rights over territories they had inhabited for centuries. Decentralization was intended to promote inclusive governance, enhance environmental governance in Black communities' territories, and reduce poverty. This paper presents a qualitative case study of decentralized inland fisheries governance in the country's largest Community Council. Our results suggest that decentralization policies need to account for particularities of resource systems and community dynamics. Inland fisheries governance poses specific challenges for decentralization because a) ecological dynamics supporting the resource system take place beyond the administrative boundaries of fisheries; b) rivers are public goods in Colombia, and therefore it is impossible to exclude users from accessing them; and c) regulations are not well-enforced in places where fish are sold. This calls for a combined effort from stakeholders with different rights, duties, and capacities within the governance system to coordinate actions for enforcing regulations.

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KEYWORDS:
Choco-Colombia; Community Council; Decentralization; Inland Fisheries; Governance

TO CITE THIS ARTICLE:
Ocampo-Diaz, N., Lopez, M. C., Axelrod, M., & Norris, P. (2022). Decentralizing the Governance of Inland Fisheries in the Pacific Region of Colombia. *International Journal of the Commons*, 16(1), pp. 78–93. DOI: https://doi.org/10.5334/ijc.1131

1. INTRODUCTION

Since the mid-1980s, decentralization of natural resource governance became popular around the world (Larson et al., 2010). Decentralization occurs when a central government devolves specific administrative, political, and economic functions to local governments that are independent of the center and sovereign within legally delimited geographic and functional domains (Andersson et al., 2014). Many decentralization policies were launched to both shape environmental governance and reduce poverty (Larson et al., 2010; Meinzen-Dick & Knox, 1999; Sjaastad & Cousins, 2009). These policies presuppose that local authorities and communities are likely to develop more effective policies and rules, grounded in local knowledge, long-term resource needs, and trust among neighbors (Larson & Soto, 2008; Lemos & Agrawal, 2006; Ostrom, 1990, 2010). Nevertheless, decentralization has proven not to be a panacea (Agrawal & Gibson, 1999; Andersson & Ostrom, 2008; Paulson Priebe et al., 2015; Ribot et al., 2006; Wright et al., 2016). Complexities are inherent in decentralization efforts, including the interplay of local interests and the achievement of legitimacy by local leaders. Who receives decentralized powers, how newly-granted and existing property rights interact, and which knowledge (expert vs. local) prevails are only some of the elements that complicate decentralization (Larson & Soto, 2008).

In Latin America, one of the ways in which decentralization was implemented was through formal recognition of the rights of historically-settled ethnic communities to manage their land (Larson et al., 2010). In the early 1990s, Colombia became the first country to specifically target a decentralization policy towards Black communities by granting collective property rights over the land because of their ethnic identity.

One of the world's most biodiverse tropical rainforests (Myers et al., 2000), the Pacific Region is home to the majority of Black communities in Colombia (Herrera Arango, 2017). This region historically has been known for its alluvial deposits of gold and platinum, as well as rich timber resources. In the eighteenth century, the Spanish had set up an extractive economy in the Pacific lowlands through slavery in gold mines; later, slave descendants appropriated this forest landscape (Leal, 2018). Nowadays, as a result of historic marginalization and structural inequity, the human groups inhabiting the Pacific remain vulnerable, experiencing low income, high rates of illiteracy and child mortality, restricted public services, and limited infrastructure (DANE, 2018), particularly transport routes, leaving the Pacific geographically and economically isolated (Romero, 2009). Moreover, this region has been deeply affected by armed conflict, as illegal groups and the Colombian army fight for control of areas in which Black communities are centered (Bello et al., 2008; COCOMACIA, 2002; Oslender, 2007, 2008).

Being granted collective property rights over the land was a major political victory for Black communities. For centuries, the National government disregarded the existence of ethnic communities inhabiting Pacific forests (Plant & Hvalkof, 2001), either by controlling resources directly or by granting permissions and opening up the land for external resource extraction. Research shows that collective titles have, to an extent, provided Black communities with more secure rights over land and a more secure resource base (Peña et al., 2017; Vélez, 2011). Moreover, new rules for the management of their territories have enabled Black communities to guard against encroachment by intruders (Martínez Basallo, 2010; Vélez, 2011), and to reduce deforestation rates in their collective lands (Vélez et al. 2020). Despite this general landscape, decentralization must be viewed as a collection of highly context-specific experiences. Important characteristics such as territory and population size vary dramatically across the titled community groups (Offen, 2003).

This research analyzes the experience in governing inland fisheries of the Consejo Comunitario Mayor de la Asociación Campesina Integral del Atrato (COCOMACIA), where rules have been created for: (i) structuring the internal organization into bodies operating at different levels; and (ii) governing natural resources in the territories. We chose fisheries over the other resource systems because of its importance for local subsistence-based livelihoods, but also because there are only few studies addressing inland fisheries governance within scholarship about decentralization (Song et al., 2018; Béné et al., 2009; Béné & Neiland, 2006).

More generally, by assessing decentralization in a new context, this study helps to identify how different conditions affect the impacts of decentralization. In addition to this substantive contribution, this paper addresses two gaps in the literature on natural resource governance in Colombia: (i) a gap in studies of inland fisheries governance, broadly speaking; (ii) a gap in research on how these new Community Councils perform in governing resource systems other than forests.

2. DECENTRALIZATION

Following the Brundtland Report (1987), central governments began considering alternative property schemes for more effective and sustainable resource management around the world (Larson et al., 2010). This coincided with growing pressure from local communities,

particularly indigenous movements, demanding that central governments recognize their rights (Larson et al., 2010; Larson & Soto, 2008). Moreover, the commons scholarship suggests that, under the appropriate circumstances, social groups are able to design and allocate rights for common-pool resource use (Feeny et al., 1990; Ostrom, 1990). Within this context, decentralization became popular for enabling beneficial local resource governance.

Decentralization policies are created with the assumption that local authorities and communities have better information about local ecosystems and users and therefore are able to develop more effective institutional arrangements (Larson & Soto, 2008; Lemos & Agrawal, 2006). Research suggests that resource users frequently deem local rules more legitimate because they rely on local knowledge and trust among neighbors (Ostrom, 1990, 2010), and because they may arise from culturally accepted traditional community governance processes (Novak & Axelrod, 2016). Decentralization may also help community leaders develop capacity for governing (Guggenheim, 2006). Consequently, these policies were launched with the aim of shaping environmental governance and reducing poverty in a culturally accepted manner (Larson et al., 2010; Meinzen-Dick & Knox, 1999; Sjaastad & Cousins, 2009).

Regardless of whether the source of rights is law or custom, rights-holders are authorized to undertake certain actions depending on the rights they hold. Importantly, however, not all authorized actions are of the same kind.[1] The distinction between authorized actions, and therefore rights, at an operational and a collective-choice level is crucial for this study. Schlager & Ostrom (1992, p. 251) describe "the difference between *exercising a right* [operational] and *participating in the definition of future rights to be exercised* [collective-choice]. The authority to devise future operational-level rights is what makes collective-choice rights so powerful." Gaining rights at the collective-choice level, beyond the operational rights, is what offers a real capacity to participate in formulating resource governance rules.

This is why, in practice, empowering local actors to use and manage natural resources has proven to be more complex than just moving authority from the central government to a particular community (Agrawal & Gibson, 1999). Even though the property rights regime under which resources are held is of great importance, understanding the array of institutional arrangements governing access to and use of resources is necessary to anticipate resource management behaviors and outcomes (Feeny et al., 1990). Additionally, given that the emergence of new actors necessarily turns the system into a multi-level governance system, this analysis must incorporate the interplay between actors representing different levels, especially within the decision-making scale (Suškevičs, 2012). Existing scholarship suggests that decentralized governance systems' performance likely depends, among others, on three types of context-specific factors explored below: (i) the nature of the resource to be governed; (ii) the extent to which local users are organized to create, monitor, and enforce the rules for resource use and management; and (iii) the degree to which actors who are subject to these local organizational arrangements interact and collaborate with other external actors (Andersson & Ostrom, 2008).

2.1 DECENTRALIZATION FOR BLACK COMMUNITIES IN COLOMBIA

In Colombia, decentralization for Black communities resulted from Law 70, adopted in 1993. Passage of the law did not automatically grant title to land; rather, communities' requests for titles require formal approval. According to the law, Black communities must first organize into Community Councils, a specific organizational structure described in Decree 1745/1995. Second, Community Councils need to create an Internal Bylaw outlining how natural resource management will be conducted in the collective territories. Only Black communities organized into approved Community Councils can be granted collective property rights to the land and vested with legal authority to design, implement, and enforce natural resource management rules within their collective territories (Offen, 2003; Peña et al., 2017; Vélez, 2011). However, Community Councils do not receive direct fiscal transfers from the State and are not recognized by law as public entities, unlike the Indigenous *resguardos,* the other ethno-territorial figure in Colombia.

The collective titling of Black communities' territories represents a complex process in which political, economic, social, ethical, and conservation aspects are intertwined. When collective titles are granted to Community Councils, a bundle of formal legal rights are devolved to communities that previously pursued *de facto* control supported by their ancestral occupation of the territories (Larson et al., 2010). This highlights the importance of understanding the dynamics of change in formal and informal institutions, as well as in the bundle of rights held by different actors that govern resource use (Gibson et al., 2002; Larson & Soto, 2008).

Decentralization, as a governance reform, affects the *structures* of the organizations or entities involved in governance and the *distribution of power* between the different actors (Béné & Neiland, 2006). Therefore, this study's objective is to consider the impact of empowering actors at different scales to govern natural resources.

3. METHODS

To assess decentralization in a particular context, we conducted a case study of COCOMACIA, a high-impact case (Patton, 2015) in Colombia for four main reasons. First, COCOMACIA has played a leading role in the historical struggles of Colombian Black communities for ethnic recognition by the State and for territorial defense (Asher, 2009; Escobar, 2008; Oslender, 2016; Restrepo, 2013). Second, as the largest Community Council in Colombia (INCODER, 2013) it is highly visible and considered an exemplary case for the country. Third, COCOMACIA has a complex organizational structure composed of administrative bodies operating at different spatial scales and involved in different decision-making processes (COCOMACIA, 2016). Fourth, the unique conditions facing fisheries within COCOMACIA's jurisdiction provide an important test of decentralization's resource governance success.

The collective territory titled to COCOMACIA consists of 722,510 ha located in the tropical rainforests of the Middle Atrato basin (see Figure 1), inhabited by 7,094 families comprising approximately 45,000 people (COCOMACIA, 2016). COCOMACIA holds a single collective title for the entire territory, but it is an association of 124 Local Community Councils (LCCs). LCCs are distributed across the collective territory in settlements along the Atrato River and its tributaries (COCOMACIA, 2016), each with a clearly defined territorial jurisdiction. As a result, three jurisdictional levels exist within COCOMACIA: the entire territory (Figure 1), administrative zones (which group LCCs by proximity, Figure 2), and the LCCs individually (Figure 3).

Among the 124 LCCs included in COCOMACIA, Tanguí (see Figures 1 and 3) was selected by the COCOMACIA's Board of Directors for this study for two main reasons. First, it is conveniently located, only two hours away from Quibdó, another data collection site. Second, Tanguí is actively involved in the organizational process of COCOMACIA, and the Board deems it as an *exemplary* LCC within the organization. While it may be difficult to generalize from Tanguí's case study to the broader COCOMACIA experience, it is nonetheless an important case for learning about the decentralization process. Moreover, we should take seriously any difficulties encountered in Tanguí; since it is deemed an exemplary case, it is a "most likely" case (Bennett, 2004) in which to expect successes from decentralization. Any concerns in Tanguí, therefore, may be likely to emerge in other cases as well.

We collected data between June–August, 2017. We conducted in-depth semi-structured interviews (20), participant observation on fishing trips (4) and community meetings (3), and coded raw data to identify themes. In addition, we reviewed official and unofficial COCOMACIA documents on the process of creating the Community Council, the organizational structure of the council, and the bylaws existing within the collective territory. Details on data collection and analysis are available in the online appendix.

4. RESULTS AND DISCUSSION: DECENTRALIZED GOVERNANCE IN ATRATO BASIN INLAND FISHERIES

As noted previously, the performance of a decentralization policy depends on: (i) the nature of the resource to be governed; (ii) the extent to which local users are organized to create, monitor, and enforce the rules for resource use and management; and (iii) the degree to which actors who are subject to these local organizational arrangements interact and collaborate with other external actors (Andersson & Ostrom, 2008). In this section, we describe each element for the specific context of Tanguí.

Tanguí has an estimated area of 5,076 ha and is inhabited by an estimated 229 families (UNHCR, 2015), distributed in settlements located on the banks of the Atrato River as well as further inside the rainforest, along the Atrato's tributaries. The main livelihoods in Tanguí are agriculture (mainly plantain and rice crops), fishing, timber extraction, and gold mining.

4.1 THE NATURE OF THE RESOURCE TO BE GOVERNED: INLAND FISHERIES IN THE ATRATO BASIN

We use Bavinck & Salagrama's (2008) conceptualization of the system-to-be-governed as a framework to describe the fisheries in Tanguí. This system includes characteristics of the ecosystem that support the fisheries and characteristics of the fishing economy, the fishers and consumers in the area. The Atrato River Basin, where Tanguí is located, has its headstream on the Western Andes mountain range and outlet into the Caribbean Sea Basin. It is a hydrographic complex that consists of a dense network of tributaries and swamps that support fisheries.

Fishing is the main subsistence-oriented livelihood in Tanguí, and fish is the main source of protein for families in the area. However, during the upstream migration, which according to the local fishers occurs between December and March, the communities of the Atrato basin, including Tanguí, turn to fishing as the main economic activity. The upstream migration season is when large stocks of fish move from the ocean to replenish the rivers and swamps in the lower, mid, and upper basins of the Atrato River and it strongly affects fish availability and mobility. Most of the

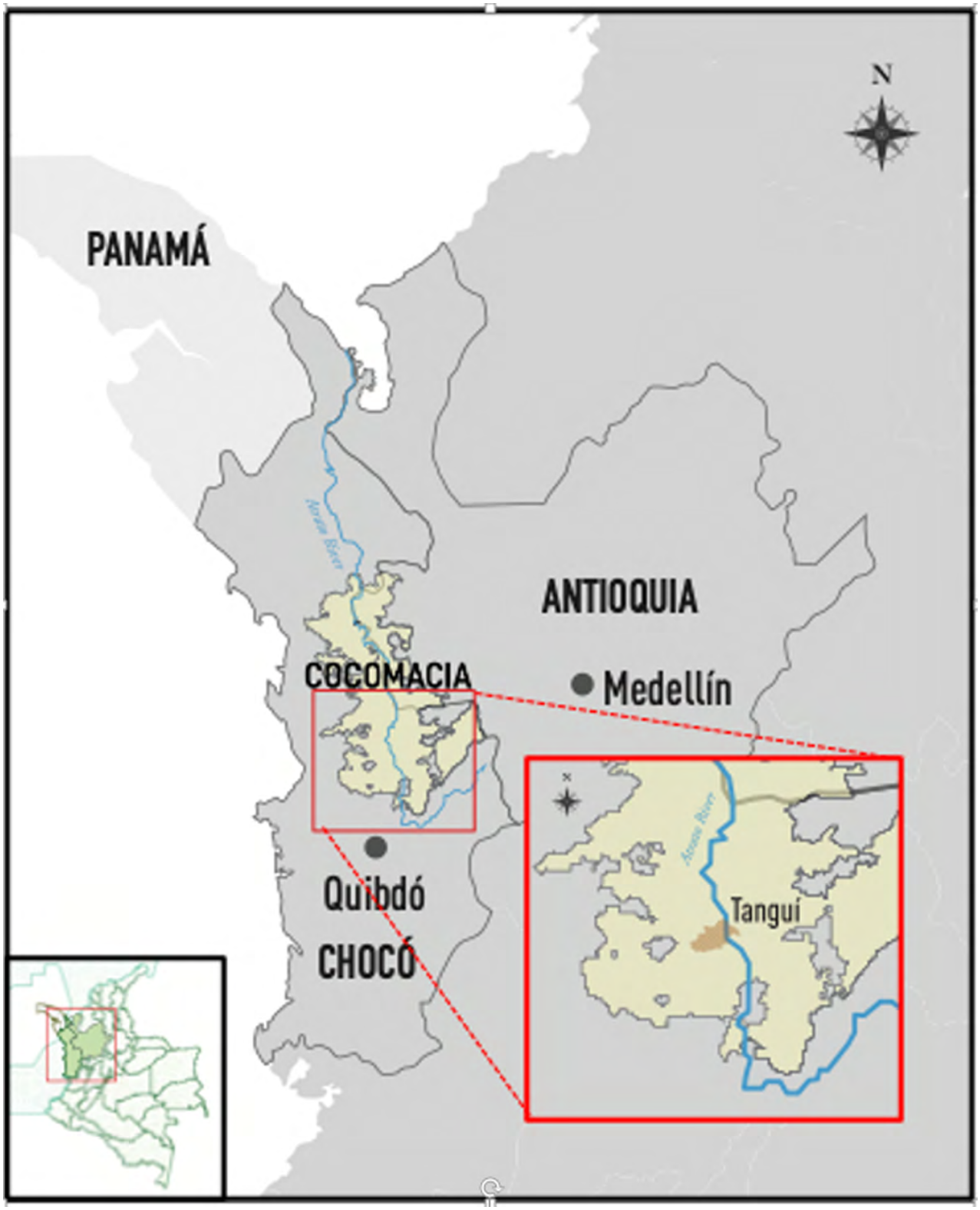

Figure 1 COCOMACIA's territory in Colombia. Source: own elaboration.

catch from the mid-Atrato basin is transported to, and sold in, Quibdó (the closest and largest urban center in the area), although some goes to other cities or local communities (COCOMACIA, 2002). Commercially speaking, the most important fish is 'bocachico' *(Prochilodus magdalenae)*, but other species such as 'doncella' (*Ageneiosus pardalis*), 'dentón' *(Leporinus muyscorum*), and 'quícharo' (*Hoplias malabaricus*) are also widely commercialized in the local

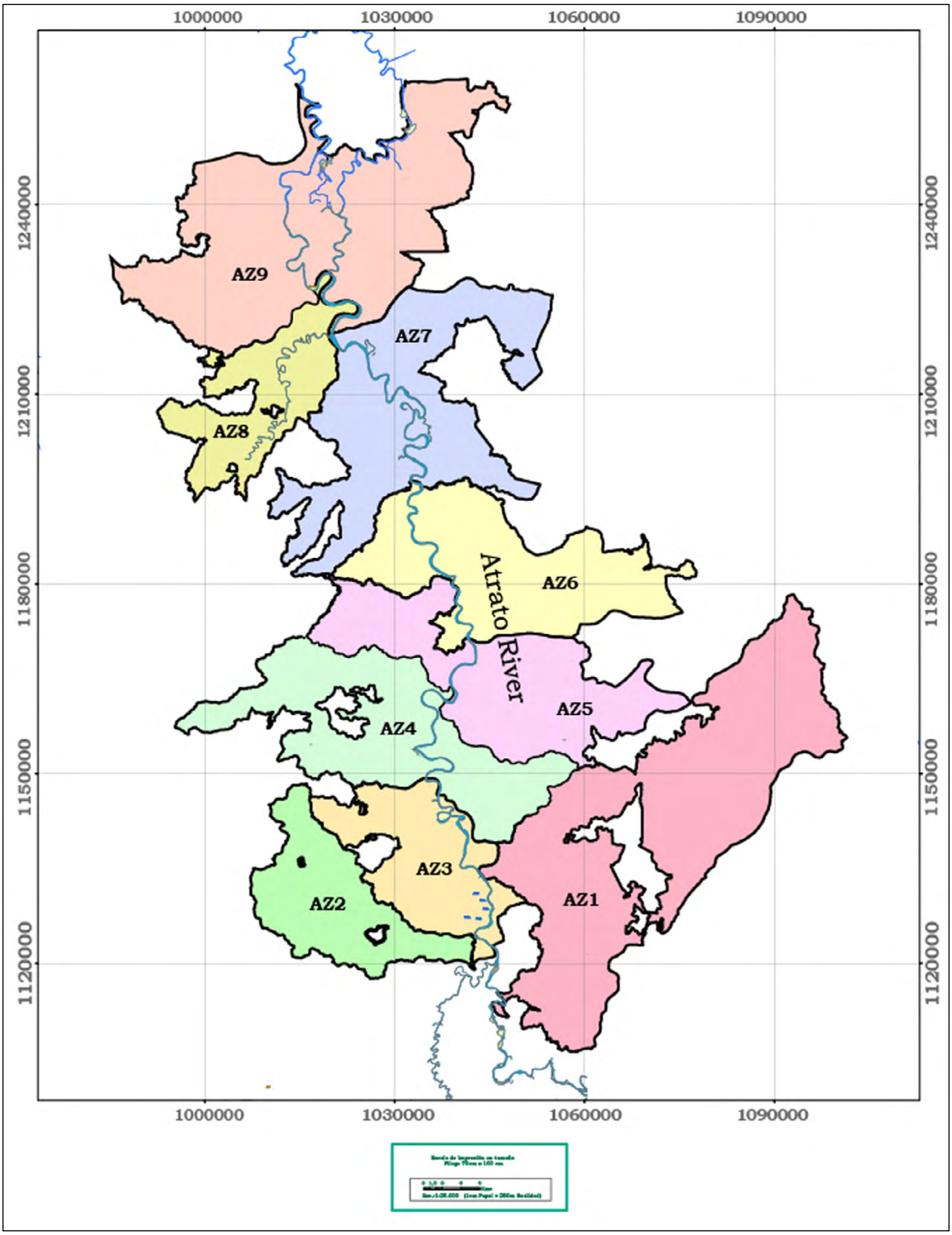

Figure 2 Administrative zones (AZ) of COCOMACIA. Adapted from COCOMACIA, 2012.

markets. Gillnets set across rivers and swamps, varying in mesh size from 2" to 4", are the main gear used by fishers.

All fishers interviewed agreed that fish stocks in Tanguí are declining. Interviewees described a decrease in fish diversity, quantity, and size. One of them compared his catch to his father's to exemplify this: "*In February, another fisherman and I went sweeping and brought like 30 arrobas [1,500 fish]. […] But down there, my dad once set up a trench, a long time ago […] he counted 914 arrobas [45,700 fish] … it was such an amount of fish that they had to open the gillnet and release the fish back into the swamp*" (Interview fisherman).

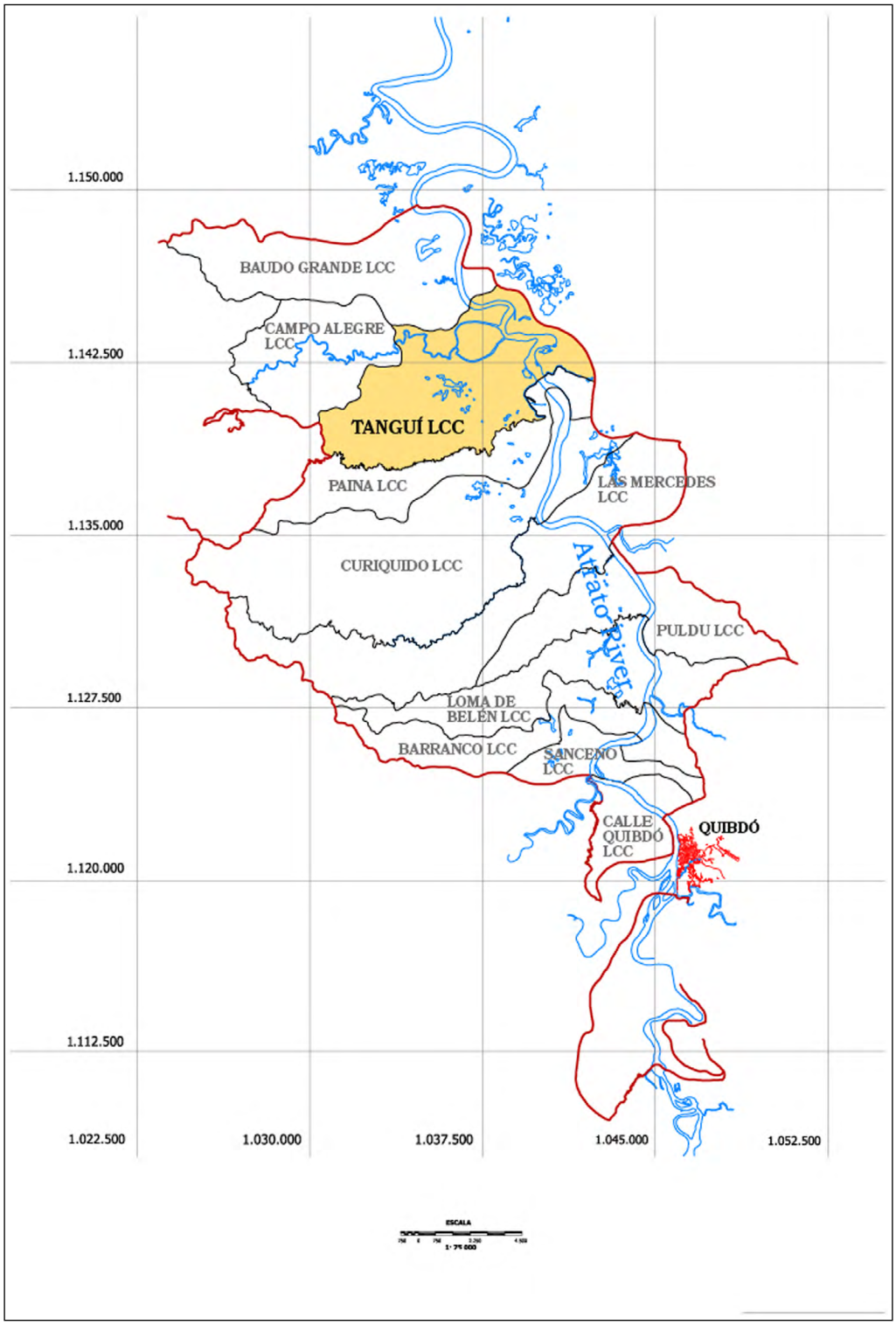

Figure 3 LCCs part of AZ3 of COCOMACIA. Tanguí is highlighted. Adapted from COCOMACIA, 2012.

Local leaders agreed that fish resources are declining and they explained that this is happening because the pressure exerted on these resources by fishers is unplanned, uncontrolled, and permanent. In terms of one of them: "*People fish to have their sustenance, to buy stuff, but people don't have a measure of how much to fish [...] The irrational, unplanned withdrawal is one of the main drivers of fish loss in the Atrato.*" (Interview Local Leader). As further evidence of substantial unplanned and permanent fishing effort, 4 out of 11 fishers noted insufficient storage infrastructure, which according to them encourages some fishers to fish daily and as-much-as-possible for increasing their profit.

According to 6 out of 11 fishers, this is aggravated by the lack of external or government actions/strategies to foster natural replenishment of fish stocks.

All of them acknowledged that, although there is a relative abundance during the upstream migration season, the overall catch has decreased. Importantly, during the upstream migration, pressure on the fish intensifies as it becomes the main economic activity for everyone in the basin: "*During the upstream migration season, people from Quibdó and surroundings arrive to communities located downstream to fish and sell their catch there. Even the ones who don't own a motorboat, they catch and sell the fish to whoever is buying there, and here [in Tanguí] they also do that.*" (Interview Fisherman).

Overall, 9 out of 11 fishers shared the idea that current fishing practices are detrimental to fish stocks, particularly the practice of fishing with gillnets with a very small mesh size. When comparing with the past, one of them reflected: "*Back then, when did you see one of those gillnets they now use to catch such little fish? No, those didn't exist before. In that time, gillnets had large mesh size [...]so the fish caught were large, those were times of 4" and 3.5" nets. [...] The seed of fish is what's being depleted.*" (Interview Fisherman). This was supported by the concern expressed by most (9 out of 11) fishers with the small fish size they encountered during the 2017 upstream migration season: "*If you bring the 3.5" and the 2.5" gillnets, you better leave the 3.5" at home because you're not catching any with that one.*" (Interview fisherman).

All fishers interviewed mentioned that mechanized gold mining in the Atrato River has negatively affected the fishery resource. Gold panning or artisanal mining has been practiced since colonial times, but mechanized mining started in the Atrato basin by the early 2000s and has rapidly spread, done mostly illegally.[2] In this type of mining, mercury is introduced into the water and contaminates the fish. Furthermore, mechanized mining alters the natural patterns and rates of sedimentation of the river by increasing the amount of soil and mineral particles in the water. Four fishers emphasized how increased sedimentation in swamps kills fish by clogging their gills and decreases available habitat by filling up root caves used by fish as shelter. According to one of them: "*When the mining backhoes arrived everything got ruined. The large swamps have dried up, have filled up and been spoiled, so I don't have anywhere to look for fish, because the swamps have filled up, dried up with a lot of mud. So, fish leave these dry areas, it doesn't stop there anymore.*" (Interview Fisherman)

4.2 CREATING, MONITORING, AND ENFORCING THE RULES FOR FISHERIES IN COCOMACIA

Major organizational changes triggered by the collective title and the creation of rules at different levels seem to have had little effect on fisheries governance in the territories. The collective title allows establishment of management rules but little other control over the resource, in part due to the public nature of surface water resources discussed below. Table 1 indicates how the main property rights over fisheries are exercised by COCOMACIA and provides insights into why control is limited.

The Atrato River is the only way local communities can enter and leave their territories, therefore it is not surprising that there are no restrictions on the right to enter fishing spots (access) or the right to catch fish within the collective territory (withdrawal). Also, in Colombia, with few exceptions, bodies of surface water are public domain, according to Decree 2811/1974. Furthermore, according to Article 9 of Law 70/1993 (Chap IV), any traditional practices used on the waters of Community Council's territories and the use of aquatic fauna for food are considered legal and,

TYPE OF RIGHT	COCOMACIA GOVERNANCE	INSTITUTIONAL LEVEL
Access	No institutions restricting the right to enter fishing spots within the collective territory	Operational
Withdrawal	No institutions restricting the right to catch fish within the collective territory. Some institutions regulating how the resource is withdrawn (restrictions on certain types of gear and minimum fish size), but little enforcement of these regulations	
Management	COCOMACIA and LCC developed guidelines and regulations for sustainable fishing but most lack enforcement.	Collective-choice
Exclusion	Surface waters are public domain, and the use of fish resources is granted by Colombian law, i.e., it does not require a permit or license. As a result, the LCC cannot exclude others from fishing spots in its territory. Illegal mechanized mining falls out of the domain of the mechanism of Prior Consultation (explained below).	
Alienation	No rights to sell or lease either of the above collective-choice rights, as the collective territories are unalienable by law.	

Table 1 Inland Fisheries' Property rights in COCOMACIA.

as such, do not require licenses or permits. (However, rules have not been written to implement this Chapter.)

As part of the exercise of the right of management, COCOMACIA as a whole, and the Tanguí LCC have developed guidelines and regulations for sustainable fishing. The Internal Bylaw of Tanguí includes rules that restrict fishing gear and defines mesh sizes and specific areas for setting nets, depending on the season. The rules also provide for sanctions and fines in case of violations. These regulations were created and formalized at the LCC level through a process allowing public participation of the entire local community. In practice, however, there is nuance in how this body of law is perceived, interpreted, adopted, or even known by the local people.

Fishers in Tanguí inherited codes of conduct related to the fishing system from previous generations. Unlike the prescriptions in the Internal Bylaw, these codes of conduct constitute social *norms*. For instance, fishers recognize that fish should not be caught if they are not mature enough. Unlike the mesh size rule, which only applies during upstream and downstream migration season, this norm applies throughout the entire year, differs by species, and is rooted in a more specific understanding of why fish size needs to be regulated. Also, all fishers interviewed believed that fishing with diving masks and harpoons in swamps is forbidden in Tanguí because it drives fish away and alters how fish are replenished throughout the hydrological complex.

Monitoring of fishing activities, on the other hand, seems sporadic and sometimes even coincidental. The size of the basin and the lack of financial means makes monitoring infeasible on a regular basis. Furthermore, when monitoring does occur, it is conducted as a reciprocal task among fellow fishers, i.e. it becomes a mechanism of social control without formal legal support. But under current conditions of fish scarcity, monitoring poses a dilemma for fishers who do not want their own fishing constrained. According to one local leader: "*I was in Tanguí a few days ago, and catching fish has become such a piece of work. […] They catch a little fish, but then […] it is very hard for one to tell people "man, release that fish…". If he releases it, then he won't have anything to feed his children.*" (Interview local leader -former fisherman-). Their capacity for enforcing the regulations is thereby hindered. Moreover, the Local Board in Tanguí has difficulty enforcing the sanctions stipulated in the Internal Bylaw, even when informed of infringement.

There is one exception to this lack of enforcement. In Tanguí, as in the entire Atrato basin, the vast majority of fishers have Black ethnicity. However, the territory is also inhabited by a few Indigenous families, part of the Emberá community. Emberá fishers use diving masks and harpoons to fish. The informal institution that prohibits the use of diving masks and harpoons for fishing is the only rule for which we found evidence of effective enforcement by Black fishers. Black fishers (majority) are enforcing the institution they deem legitimate on Indigenous fishers (minority), as the activity is taking place within the boundaries of a territory entitled to Black communities. This exception suggests that elements of ethnic identity are intertwined with rule recognition, compliance, and enforcement in the territory.

This exception also calls attention to the notion of legitimacy, as Indigenous and Black fishers deem different bodies of regulation legitimate. Both ethnic groups follow their traditional methods for fishing, but only the ones used by Black fishers are legitimized by the institutional landscape existing in the territory. Future studies may wish to explore how the dominance/prevalence of one institutional landscape over another shapes rule enforcement and ultimately resource governance, particularly in a context where the sovereignty/prevalence of one body of rules is supported in a formal title over the land.

The enforcement gap within COCOMACIA is aggravated by the lack of enforcement outside of COCOMACIA's territory, in Quibdó, where the most important fish market is located. According to CODECHOCÓ, the regional environmental agency, enforcement of the minimum fish size rule has been attempted in Quibdó's market by AUNAP (the National Authority of Aquaculture and Fishing created in 2011), but it has failed to be implemented and sustained. In fact, to date AUNAP does not even have clear regulations to manage fisheries in the Atrato, limiting the potential effectiveness of Tanguí's rules. None of the interviewed fishers mentioned AUNAP or recognized it when asked.

The mobility of fisheries (Schlager et al., 1994), particularly the existence of trans-boundary stocks (species with reproductive cycles taking place beyond the 'administrative' boundaries of fisheries), poses specific challenges for management (Béné & Neiland, 2006). Within the collective territory of COCOMACIA, decision-making around mobile fish resources should ideally take place at the basin level, integrating different LCCs. Although COCOMACIA holds great potential for facilitating dialogue and rule-creation between communities located in different portions of the Atrato basin, initiatives of this nature are not currently occurring in the collective territory. This is presumably one of the many consequences of the limited financial capacity of the Community Council for holding community-wide meetings. However, it is AUNAP's mandate to create a fisheries management plan for the Atrato basin in cooperation with local and regional stakeholders, which includes COCOMACIA. Meetings for the creation of such a plan began in late 2021 and it is a work in process.

Collective-choice rights of exclusion are also complicated because surface waters are public domain, which means the collective property right cannot include an ability to exclude others from using the rivers. This limitation extends to excluding external fishers from using the waters for resource extraction or for transportation. However, Community Councils are entitled by law to the mechanism of Prior Consultation as a fundamental right for protecting their integrity, by being consulted before any licenses are granted for interventions that can potentially impact their territories. Regarding gold mining, at the local level, fishers emphasized mining-induced water quality change as another important driver of fish stock declines. Sedimentation and water contamination are associated with the widespread illegal practice of mechanized gold mining in the Atrato Basin (Palacios-Torres et al., 2020). As an external disturbance to the fisheries system, mining poses a clear challenge for its governance (Béné & Neiland, 2006). However, fishers and/or local representatives, or even COCOMACIA, lack the capacity to control this type of resource use. Some mines are physically located beyond COCOMACIA's jurisdiction. Also, the activity's illegality means that controlling it falls out of the domain of Prior Consultation and therefore depends entirely upon government authorities with coercive power.

Importantly, in light of the limited means available for guarding their territories from gold mining encroachment, people at the local level within COCOMACIA face a difficult choice whether to allow mines to enter their territories. In these cases, the local communities weigh many other concerns besides environmental ones. When the machinery is in the riverbed and a gold mine is established, local communities sometimes are resigned to their operation, even if they started without local consent. Their acceptance may be tied to mine operators' practice of paying the communities a portion of the gold extracted and providing job opportunities. With the historical absence of the State, illegal gold mines have represented one of the few sources of income for local communities. Considering some of these communities' precarious economic conditions, illegal gold mines also appear to provide people with access to primary infrastructure (such as electric power, potable water, and even internet access), which was previously neglected by the State. This, in turn, changes people's perceptions of the mines and ultimately justifies their illegal operation within their territories.

4.3 INTERACTION AND COLLABORATION WITH EXTERNAL ACTORS

Environmental governance refers to the set of regulatory processes, mechanisms, and organizations through which political actors influence environmental actions and outcomes (Lemos & Agrawal, 2006, p. 298). According to Béné & Neiland (2006), governance encompasses a multi-actor dimension, emphasizing the fact that central governments are no longer the exclusive, nor necessarily the most important, source of decision-making in environmental issues (Armitage et al., 2012; Lemos & Agrawal, 2006). Studies of decentralized governance in Latin America also suggest that collaboration and coordination among actors who have a stake in governance of the resource are key to achieving effective governance arrangements (Andersson & Ostrom, 2008; Wright et al., 2016). Local decision-making by an entity that has been granted authority for managing resources has to be combined with institutions at higher levels of governance (Larson et al., 2007), particularly when addressing threats from other sectors to sustainable inland fishing (Song et al., 2018). As such, the effectiveness of decentralization depends on constructing accountable institutions at all levels of government, while securing autonomous decision making at the local level (Ribot et al., 2006). For accountability to be achieved in these settings, it is necessary to delineate responsibilities and functions of the decision-making bodies and entities that comprise the governance system (Ribot et al., 2006; Suškevič, 2012).

Accountability mechanisms allow each participant to understand their individual responsibilities under co-management. Also, accountability implies the control of misuses of power for those who might not be able to directly participate in decision-making, and it has been defined as a criterion for assessing legitimacy (Suškevičs, 2012). Legitimacy refers to the perceived fairness, correctness, or rightfulness of power relations (Beetham, 1991; Matti, 2009 in Sandström et al., 2014). In a multi-level governance[3] system involving emergent community organizations as key stakeholders, legitimacy is at stake in the informal and formal institutions, as well as in the interplay between these realms. Downward accountability (defined by Béné & Neiland as "the institutional mechanisms or processes through which executing agents or decision-makers are liable to be called to account by their beneficiaries" (2006, p. 33)) is therefore required both within COCOMACIA and between COCOMACIA and the other actors within the governance system.

Accountability within COCOMACIA

COCOMACIA's internal structure was conceived with the aim of distributing decision-making and power among the multiple communities covered by the collective title. However, high transaction costs within the organization (such as elevated transportation costs of holding a general assembly meeting, given the long distances between villages and the absolute reliance on river transportation), coupled with the lack of financial autonomy (explained

earlier as a result of how the CC were created by Law), have undermined connectivity between the decision-makers at the broad level of COCOMACIA and the local communities within it. The weakening of these links has resulted in threats to participation, representation, and therefore to downward accountability within the organization.

For the management of the fishery, this has additional implications like the lack of monitoring and enforcement of regulations in Tanguí, nor in Quibdó. This situation has contributed to what fishers perceive as an unsatisfactory response from a non-accountable LCC to the drivers of fish depletion in the territories.

Accountability between COCOMACIA and other actors

Other authorities in the region have a bad reputation in the eyes of COCOMACIA's leaders and members in general. This reputation is the product of corrupt practices in licensing, rule enforcement, and sanctioning, combined with rare, ephemeral actions taken in response to COCOMACIA's public claims and requests for support in enforcing regulations. A local leader provided an example of a situation in which, according to him, CODECHOCÓ (the regional environmental authority) was evidently turning a blind eye and failing to enforce sanctions: "*There was a time in which the dredges [machinery for illegal mechanized mining] were in front of CODECHOCÓ [...] Yes, parked there. Working. And it was the pressure from the community what made them take action. CODECHOCÓ knows, the Police knows, [...]. Those things are massive! And they pass by in front of CODECHOCÓ*" (Interview local leader). As mentioned before, fisheries governance within COCOMACIA depends significantly on external authorities. Therefore, the negligence and poor performance of external authorities in this regard severely limits the Community Council's capacity.

Black communities in general, and COCOMACIA in particular, have sufficient reasons to distrust the Colombian State. Not only did the State fail to guarantee land access to Black Peoples prior to Law 70/1993, but it continues to fail at securing the acquired rights by neglecting rule writing for several chapters of the law. The neglect of rule writing has limited Community Councils' role as formal stakeholders that was confirmed by law more than 20 years ago. Until rules are written to establish specific responsibilities for resource governance at local and regional levels, Community Councils are structurally handcuffed in their actions around resource governance. Effective accountability mechanisms cannot be implemented between stakeholders without responsibilities being clearly delineated (Suškevičs, 2012).

In addition, mandates with clear rules are not being implemented by the State. Law 70/93 explicitly requires Community Councils to participate in executive meetings with environmental offices with overlapping jurisdictions, which could be an opportunity for creating accountable relations between stakeholders. However, this mandate is not currently enforced. The government is, by law, supposed to provide funds for an officer of COCOMACIA to be formally appointed in this position, but there is no evidence of this ever being in place. As a result, COCOMACIA is kept on the sidelines of resource governance decision-making and further restricted in its already limited capacity to function within the governance system. Not only is it unable to communicate directly with other decision-making authorities, COCOMACIA is also prevented from exercising oversight and control over actions of other stakeholders, including those with reputations for corrupt behavior.

In summary, limited institutional mechanisms are currently available for Community Councils to hold external authorities accountable. Community Councils are entitled by law to perform resource management duties (even if these are not clearly delineated), and the accountability mechanisms at hand for them should be commensurate with such responsibilities. However, that is not the case, at least in the context of COCOMACIA. To date, Prior Consultation has been the default point of leverage for COCOMACIA, but this mechanism has proven ineffective for holding external authorities accountable, as other studies find (Machado et al., 2017; Walter & Urkidi, 2016; Weitzner, 2017). Moreover, Prior Consultation does not occur when external authorities fail to act, as in examples above, which leaves Community Councils with no actual means for holding authorities accountable. Ultimately, if accountability is considered a necessary criterion for earning legitimacy (Suškevičs, 2012), COCOMACIA's legitimacy is undermined by the structure and practice of interaction among stakeholders.

4.4 IMPACTS OF THE GOVERNANCE SITUATION

This study emphasizes that decentralization policies need to account for the particularities of the resource systems and community dynamics existing in the territories. The governance of inland fisheries in the Colombian Pacific poses unique challenges to the decentralization policy that intended to aid Black communities' autonomy. In general, COCOMACIA chose to operate with prescriptions for resource management enforced at the local level by LCCs. However, pollution externalities, the mobility of fish (Schlager et al., 1994), and the existence of species with reproductive cycles taking place beyond the 'administrative' boundaries of fisheries (Béné & Neiland, 2006) call instead for a regional approach. In particular, enforcement of regulations outside the collective territory and by other stakeholders (e.g. at the fish market in Quibdó) represents an urgent need. Moreover, fisheries involve the governance of rivers, spaces of public domain where access is hard to regulate. This condition, specific to fisheries, clearly limits

the actions that can be undertaken by Community Councils to exclude actors who threaten the resource. These challenges stress the need for a polycentric approach for governing fisheries, where multiple stakeholders – with different formal rights, abilities, duties, and capacities within the governance system – coordinate actions and work together at enforcing regulations.

Moreover, this study stresses the need to unpack the concept of decentralization in the literature to define precisely what processes of decision-making are addressed by the policies in place and for what actors in the governance system. In Colombia, the law effectively decentralized resource management, but it failed to decentralize other property rights or achieve enforcement of the institutions that did emerge, at least for the case of inland fisheries. The Colombian State has failed to deliver on its "good will", as there have been multiple issues and delays in the implementation of the new regulations and laws for distributing authority and power to Community Councils (Baquero, 2014; García et al., 2014; Offen, 2003). To date, it is yet unclear how Community Councils are to coordinate actions with the National Environmental System (SINA, Sistema Nacional Ambiental), the system that brings together Colombian environmental governance stakeholders (García et al., 2014).

As it has been discussed throughout the paper, the role of COCOMACIA in resource governance has been constrained by the central government's failure. This inaction calls into question the position of the Colombian State towards Black communities and their rights.

5. CONCLUSION

We suggest that building sustainable institutions in decentralized regimes entails more than just granting local stakeholders the right to design resource management institutions. As mentioned by Saavedra-Díaz and Jentoft (2017, p. 573), fisheries in Colombia suffer from a "dysfunctional governance system", therefore the challenge is even bigger in the context of small-scale riverine fisheries with newly delegated authorities in environmental governance that need to be empowered to control resource use, coordinate with other agencies, and enforce their rules to ensure sustainability, while having effective mechanisms to hold these other agencies accountable.

Community Councils already holding a title experience several challenges in their endeavors. Monitoring and autonomous rule enforcement are hindered by lack of financial resources in their territories (Baquero, 2014; Offen, 2003; Vélez, 2011). This situation has led to a heavy dependence on external financial, logistical resources from NGOs, municipalities, and other State offices or the establishment of unsustainable practices such as mining in their territories. Sometimes local leaders and elected representatives of the rural areas end up leaving the territories and moving to cities, closer to the resources and contacts for funding and project opportunities for their communities. This phenomenon ultimately leads to bureaucratization of decision-making and community participation arenas, because of the growing distance between decision-makers and the people they represent (Baquero, 2014). Therefore, in the long term, the dependence on external funding might undermine local governance (Baquero, 2014; Vélez, 2011).

The titling process for Black communities is still ongoing. There are Black communities currently waiting for their applications to be reviewed and approved, and there are some others which are only starting to conceive the possibility of organizing into Community Councils. The titling process has been anything but easy or straightforward for these communities. Many communities have experienced difficulties understanding the process for acquiring title and becoming knowledgeable on their related rights (Martínez Basallo, 2010; Restrepo, 2002).

This case study suggests that decentralization of Black communities in Colombia is incomplete. This finding supports the need to unpack the notion of decentralization found in the governance literature, as there are multiple processes and stages of decision-making that can be decentralized in resource governance, each of which operates under different logics and contexts. For instance, successfully decentralizing decision-making around institutional design does not necessarily imply that decision-making around enforcement is also effectively delegated, as we found in Atrato Basin fisheries. In fact, a fully decentralized resource governance regime requires sustained efforts in re-designing institutions, the duties related to enforcing these institutions, and the accountability mechanisms available for the stakeholders involved in the process. The need for enhanced accountability mechanisms among decision-making bodies within COCOMACIA, as well as between different stakeholders in the governance system of fisheries, is evident.

Overall, this study provides an example of how institutional analysis enables exploring power dynamics in decentralized regimes. This study further contributes to needed knowledge about decentralized inland fisheries' governance (Béné et al., 2009; Béné & Neiland, 2006). However, these findings do not imply that the situation faced by COCOMACIA and/or other Community Councils for governing other resources is the same for all inland fisheries. The decentralization of environmental governance in Colombia failed to account for the particularities of the

ecosystems they are supposed to manage, which pose specific governance challenges. The policy also does not address the need to coordinate actors across different sets of institutional arrangements. Better governance is necessary to address fishers' concerns that this resource is being depleted, compromising the food security and livelihoods of riverine communities. This situation calls for urgent responses which, according to the findings, should be undertaken at different levels and by different stakeholders. Future studies should explore specific governance challenges posed to Community Councils by other resources, and what institutional arrangements and enforcement mechanisms can effectively help address them in practice.

NOTES

[1] Schlager and Ostrom (1992, p.250) emphasize that: "'Rights' are the product of 'rules' and are not the equivalent. 'Rights' refer to particular actions that are authorized (V. Ostrom, 1976) while 'rules' refer to the prescriptions that create authorizations". In that sense, rules prescribe what rights are authorized and how those rights are exercised and protected.

[2] In Colombia a gold mine requires a mining license, granted at the national level by the National Mining Agency (Agencia Nacional de Minería) and an environmental license. "Illegal" in this context means mining without having both licenses.

[3] Multi-level governance is defined as "the interplay between various actors from private, governmental and voluntary sectors, representing different levels foremost within the jurisdictional (i.e. decision-making) scale, where levels can be distinguished" (Suškevičs, 2012, p. 218).

ADDITIONAL FILE

The additional file for this article can be found as follows:

- **Supplemental File 1.** Methodological Approach. DOI: https://doi.org/10.5334/ijc.1131.s1

ACKNOWLEDGEMENT

This research would not have been possible without the generosity of the people in Tanguí and in COCOMACIA. Infinite thanks to each and all of the people there who shared their time, insights, experiences and knowledge with us. We are also deeply grateful with Nicolás Giraldo, our extraordinary photographer and assistant in the field; Laura Castro-Díaz, our peer coder of the raw data in Spanish whose inputs were crucial for building the coding book; and WWF Colombia, particularly Carmen Candelo, who linked us with COCOMACIA. We appreciate the comments received on the earlier versions of the paper presented at the 2018 AAG conference in New Orleans (USA) and the 2019 IASC conference in Lima (Peru). The Center for Latin American and Caribbean Studies, the Department of Community Sustainability, and the Graduate School at Michigan State University, as well as Fulbright Colombia, provided funding to support this research. Any errors are entirely the responsibility of the authors.

COMPETING INTEREST

The authors have no competing interests to declare.

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TO CITE THIS ARTICLE:
Ocampo-Diaz, N., Lopez, M. C., Axelrod, M., & Norris, P. (2022). Decentralizing the Governance of Inland Fisheries in the Pacific Region of Colombia. *International Journal of the Commons*, 16(1), pp. 78–93. DOI: https://doi.org/10.5334/ijc.1131

Submitted: 19 May 2021 **Accepted:** 01 May 2022 **Published:** 30 May 2022