COLLECTIVE TITLING AND DECENTRALIZED GOVERNANCE: THE CASE OF BLACK COMMUNITIES IN THE COLOMBIAN PACIFIC REGION

Ву

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ABSTRACT

COLLECTIVE TITLING AND DECENTRALIZED GOVERNANCE: THE CASE OF BLACK COMMUNITIES IN THE COLOMBIAN PACIFIC REGION

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Colombia launched a decentralization process on behalf of Black communities by granting them collective property rights over the land that they had inhabited for centuries. Black communities are organized into Community Councils, vested with the legal authority to design, implement, and enforce rules to govern natural resources within their collective territories. The process was a major political victory for this group, given its history of marginalization. To date few studies have examined how Community Councils have positioned themselves in the environmental governance system in Colombia. I explore how the institutional context and the capacity for action of COCOMACIA (the largest Community Council in the country) around the governance of inland fisheries changed with the decentralization process. Despite major changes triggered by the collective title, COCOMACIA has a limited capacity for action due to financial constraints, limited participation in decision-making, and lack of effective accountability mechanisms. The policy that decentralized environmental governance in Colombia failed to account for the ecosystem features of the territories, overlooking the need of coordinated institutional arrangements from different stakeholders for its governance. This study contributes to the knowledge on inland fisheries' governance and shows how notions of institutional analysis and governance provide a way of explicitly exploring power dynamics. Finally, it stresses the need of unpacking the notion of decentralization in the literature.

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KEY TO ABBREVIATIONS

Abbreviation	Spanish	English
ACIA	Asociación Campesina Integral del Atrato	Integral Campesino Association of the Atrato
AT 55	Artículo Transitorio 55	Transitory Article 55
AUC	Autodefensas Unidas de Colombia	United Self-Defense of Colombia
CAR	Corporaciones Autónomas Regionales	Autonomous Regional Corporations
CECN	Comisión Especial de Comunidades Negras	Special Commission for Black communities
COCOMACIA	Consejo Comunitario Mayor de la Asociación Campesina Integral del Atrato	Major Community Council of the Integral Campesino Association of the Atrato
CODECHOCÓ	Corporación Autónoma Regional para el Desarrollo Sostenible del Chocó	Autonomous Regional Corporation for Sustainable Development of Chocó
CORPOURAB Á	Corporación para el Desarrollo Sostenible del Urabá	Autonomous Regional Corporation for Sustainable Development of Urabá
DANE	Departamento Administrativo Nacional de Estadística	National Administrative Department of Statistics
DIAR	Proyecto Desarrollo Integral Agrícola Rural	Agricultural Integral Rural Development Project
DNP	Departamento Nacional de Planeación	National Planning Department
FARC-EP	Fuerzas Armadas Revolucionarias de Colombia - Ejército del Pueblo	Revolutionary Armed Forces of Colombia - People's Army
GEF	Fondo Global para el Medio Ambiente	Global Environmental Facility
IAvH	Instituto de Investigación Alexander von Humboldt	Alexander von Humboldt Institute for Research
IDEAM	Instituto de Estudios Ambientales y Meteorología	Institute for Meteorology and Environmental Studies

IIAP	Instituto de Investigaciones Ambientales del Pacífico	Institute for Environmental Research of the Pacific
INCODER	Instituto Colombiano de Desarrollo Rural	Colombian Institute of Rural Development
INCORA	Instituto Colombiano para la Reforma Agraria	Colombian Institute for the Agrarian Reform
INVEMAR	Instituto de Investigaciones Marinas y Costeras	Institute for Marine and Coastal Research
LCC	Consejo Comunitario Local	Local Community Council
MADS	Ministerio de Ambiente y Desarrollo Sostenible	Ministry of Environment and Sustainable Development
NGO	Organización no gubernamental	Non-governmental Organization
OBAPO	Organización de Barrios Populares y Comunidades Rurales del Chocó	Organization of Popular Neighborhoods and Rural Communities of Chocó
OCABA	Organización Campesina del Bajo Baudó	Campesino Organization of lower Baudó
PAFC	Plan de Acción Forestal para Colombia	Forestry Action Plan for Colombia
PMNR	Programa de Manejo de Recursos Naturales	Resource Management Program
РОТА	Plan de Ordenamiento Territorial Agropecuario	Territorial Agricultural Master Plan
SINA	Sistema Nacional Ambiental	National Environmental System
SINCHI	Instituto de Investigaciones Amazónicas	Institute for Amazonic Research
UNHCR	Alto Comisionado de las Naciones Unidas para los Refugiados	United Nations High Commissioner for Refugees
WWF	Fondo Mundial para la Naturaleza	World Wildlife Fund

INTRODUCTION

Starting in the mid-1980s, decentralization of natural resource governance became a popular strategy around the world, taking center stage in the World Bank's policies for developing nations (Larson, Barry, & Ram Dahal, 2010). Decentralization can be defined as "the devolution by a central government of specific functions, with all the administrative, political and economic attributes that these entail, to local governments that are independent of the center and sovereign within a legally delimited geographic and functional domain" (Andersson, Evans, Gibson, & Wright, 2014, p. 259).

Decentralization policies are created under the core assumption that local authorities and communities have better information about local ecosystems and users and therefore are prone to develop better more effective policy solutions (Larson & Soto, 2008; Lemos & Agrawal, 2006). It is also argued that resource users frequently deem local rules more legitimate because they rely on local knowledge and trust among neighbors (Ostrom, 1990, 2010). Consequently, many decentralization policies were launched both as a means of shaping environmental governance and reducing poverty (Larson et al., 2010; Meinzen-Dick & Knox, 1999; Sjaastad & Cousins, 2009).

Nevertheless, decentralization has proven not to be a panacea (Agrawal & Gibson, 1999; Andersson & Ostrom, 2008; Paulson Priebe, Evans, Andersson, & Castellanos, 2015; Ribot, Agrawal, & Larson, 2006; Wright, Andersson, Gibson, & Evans, 2016).

In Latin America, decentralization was implemented through the formal recognition of the rights of historically-settled ethnic communities to manage their land (Larson et al., 2010). This required local communities to form new entities through

processes of self-organization of local resource users (Larson, Pacheco, Toni, & Vallejo, 2006; Larson & Soto, 2008; Lemos & Agrawal, 2006; Meinzen-Dick, 2007). In the early 1990s, Colombia became the first country to specifically target a decentralization policy towards Black communities by granting them collective property rights over the land because of their ethnic identity.

Studying institutions – "the rules of the game" (North, 1990)- is key for understanding the way groups face choices for governance of natural resources. Importantly, institutions undergo a constant process of change along with the social groups that follow them (Cleaver, 2001; North, 1990; Ostrom, 2013). In the decentralization policy implemented in Colombia, Black communities, organized into Community Councils that are collectively entitled to the land, are vested with the legal authority to design, implement, and enforce rules to govern natural resources within their collective territories (Offen, 2003; Peña, Vélez, Cárdenas, Perdomo, & Matajira, 2017; Vélez, 2011). In other words, a bundle of de jure rights -a set of rules established and protected by the state- are delegated to communities that previously exercised de facto rights supported by their ancestral occupation of the territories (Larson et al., 2010). In this context, understanding the dynamics of change in formal and informal institutions, as well as in the bundle of *de jure* and *de facto* rights held by different actors, that govern the use of resources is an important part of an analysis of the decentralization process (C. C. Gibson, Lehoucq, & Williams, 2002; Larson & Soto, 2008).

The particular institutional context within which Community Councils are embedded is the result of a process of navigation, where roles and responsibilities of the organization and the other stakeholders in the region have been negotiated (Larson, Cronkleton, & Pulhin, 2015). To date, however, few studies have specifically examined how Community Councils have positioned themselves in the environmental governance system in the country (e.g., Martínez Basallo, 2010; Vélez, 2011). To address this gap, this study proposes an analysis of governance reform in Colombia that resulted from a process of institutional change, specifically a change in rights granted by law.

Given that each Community Council has followed a unique process for achieving and implementing its collective rights over the land, I conducted a case study on the *Consejo Comunitario Mayor de la Asociación Campesina Integral del Atrato* - COCOMACIA. The leadership of COCOMACIA in the historical struggles of Colombian Black communities for ethnic recognition by the State and territorial defense (Asher, 2009; Escobar, 2008; Oslender, 2016; Restrepo, 2013) and the fact that it is the largest Community Council in Colombia (INCODER, 2013) make this a high-impact case (Patton, 2015).

Importantly, as COCOMACIA's territory contains a wide array of natural resources, I focus on analyzing the governance of inland fisheries for its importance in the subsistence-based livelihoods of the people in this context. Among the different livelihoods in COCOMACIA's territory, fishing is the only activity that is practiced by all resource users, and it is the main source of protein for households. Moreover, analyzing fisheries greatly contributes to the literature, given that the number of documents

addressing the issue of governance in inland fisheries is rather limited, particularly within studies of decentralization (Bene, 2004; Béné et al., 2009; Béné & Neiland, 2006).

Therefore, in this study I examined how the institutions of fisheries governance by COCOMACIA changed with the decentralization process. More specifically, I: (i) review the ways in which the Community Council responded to collective titling in terms of its organization and institutional structure; (ii) describe the current institutional landscape for governing inland fisheries; and (iii) discuss the capacity for action of COCOMACIA in regard to fisheries governance.

The analysis of this case study stresses the need to unpack the notion of decentralization. In the literature, it is implied that decentralization entails a redistribution of decision-making responsibilities in the governance of natural resources which empowers local communities and/or governments. However, decentralizing decision-making entails more than a single process. Studying decentralization, therefore, requires a careful and differential examination of each of these decision-making stages. This study specifically explores decision-making around the design and implementation of fisheries' institutions in the case study, within the context of its broader governance system and its intrinsic power relations.

Interestingly, although decentralization implies by definition a re-distribution of power, for some authors the approaches undertaken for studying these policies tend to lack a clear exploration of power dynamics (Agrawal & Ostrom, 2001; Clement, 2010; Raik, Wilson, & Decker, 2008). A similar critique has been made of the frameworks of

institutional analysis (Clement, 2010; Epstein, Bennett, Gruby, Acton, & Nenadovic, 2014; Kashwan, 2017). To overcome this, I explicitly follow the *realist view of power* (Raik et al., 2008), which calls attention to the ability of individuals or groups to maneuver and make choices within structured social relations. Following this definition, the social structure that I consider in this study is the structure of the environmental governance scheme for managing fisheries in the lowlands of Chocó, Colombia. This includes the stakeholders and entities that participate in the governance scheme, as well as the formal and informal rights and institutions under which such entities operate. I focus on exploring COCOMACIA's ability to maneuver and make choices within the Council itself, and the social relations between the Community Council and other stakeholders that participate in governing fish resources in the area.

The collective titling of Black communities' territories represents a complex process where conservation issues are deeply intertwined with political, economic, social, and ethical aspects. In Colombia, the majority of Black communities are concentrated in the Pacific Region (Herrera Arango, 2017). This region includes one of the most biodiverse tropical rainforests in the country (Rangel-Ch, 2011) and the world (Myers, Mittermeier, Mittermeier, da Fonseca, & Kent, 2000). Moreover, this highly-biodiverse region historically has been known for its alluvial deposits of gold and platinum (Leal León, 2009), as well as its richness in timber resources (Oslender, 2007). Paradoxically, however, the human groups inhabiting these areas are considered to be one of the most vulnerable populations of the country, given their high rates of illiteracy

and child mortality and the low levels of infrastructure and public services in their territories (DANE, 2012; Departamento Nacional de Planeación, 2008).

From a historical perspective, being granted collective property rights over the land has been a major political victory for Black communities in Colombia. Prior to the National Constitution of 1991, the National government disregarded for centuries the existence of the ethnic communities inhabiting the forests of this region (Plant & Hvalkof, 2001). Controlling resources and concessioning off and opening up the land for external intervention are examples of ways in which the Colombian government exercised its influence and power in this region of the country.

In addition, Black communities in the Pacific Region were deeply affected by the Colombian armed conflict. Paramilitary forces, guerrilla groups, and even the Colombian army were responsible for crimes against civil society in this region as part of disputes for territorial control (Agudelo, 2005; Bello, Jiménez Ocampo, Millán, & Pulido, 2008; COCOMACIA, 2002; Oslender, 2007, 2008; Oyola Rios, 2017). Nowadays, although these armed actors are no longer present in the area, newly constituted armed groups, most of which are associated with the illegal economies of timber and gold, continue to threaten Black communities and their territories. Nevertheless, the collective titling process and the constitution of Community Councils have given Black communities more secure rights over the land and a more secure resource base (Peña et al., 2017; Vélez, 2011).

Reflection on positionality

I consider it necessary to disclose my position towards my own research process to situate myself as a researcher. This is referred to in the literature as positionality (Reay 1996: 443 in Ladino, 2002), a concept critical for Feminist scholars, among others.

Although I do not frame my research within the Feminist literature or address my topic of study from a Feminist approach, I personally adhere to the claim of positionality being a fundamental task of researchers.

I think of myself as a Constructivist (Crotty, 1998; Lincoln, Lynham, & Guba, 2011; Patton, 2015), influenced by elements of Critical Theory (Lincoln et al., 2011). In that sense, my epistemological position as a researcher rests upon four tenets: (i) context is essential for the analysis; (ii) research is a political affair, for all knowledge implies power and social responsibility; (iii) knowledge is meant to serve praxis, hence different kinds of knowledge (rational, experiential, practical, behavioral, theological, etc.) are legitimate; and (iv) learning is a dynamic process through which we permanently construct and deconstruct meanings. The complexity of the institutional change triggered by decentralization in the Colombian Pacific calls for an institutional analysis where meanings, worldviews, forms of legitimization, and authority are uncovered. Taking into account that these aspects may or may not be visible in public decision-making contexts or in retrievable documents (Cleaver, 2000; Cleaver & De Koning, 2015; De Koning & Cleaver, 2012), this study privileges the view from within, from the perspective of the ones who have lived the process.

Moreover, in Ladino's (2012: 2.1) words, "evolving aspects of the visiting fieldworker's positionality (as a researcher, a feminist, a friend, etc.) invariably affect the researcher's participation in daily activities during fieldwork, his/her responses to community norms and ultimately his/her access to the data". This is particularly relevant in my case, as a privileged, white-skinned woman researcher, born in the Colombian capital city of Bogota, far from the territories where I conducted my case study. In this case, although I was a fellow Colombian to the people in the local communities, I acknowledge my position of outsider –or *paisa*, as they referred to people like me who come from other regions of the country. Unfortunate past experiences have led to a generalized mistrust by the locals in *paisas* arriving for the first time to the area. Recognizing the perceptions that local peoples had of me during the time in the field was crucial for adapting my research design and data collection strategies, but also for later interpreting and analyzing the data collected.

CONTEXT

The Pacific Region of Colombia

The Pacific region (see Figure 1) comprises an area of around 71,000 km² on the Western side of Colombia (Restrepo, 2002) sparsely inhabited by around 1.3 million people, around 3% of Colombia's national population (Oslender, 2016).



Figure 1. Natural regions of Colombia.

Source: Shadowxfox (20 October 2018) Regiones naturales de Colombia. Licensed under Creative Commons Attribution-Share Alike 4.0 International on Wikipedia. Retrieved from: https://commons.wikimedia.org/wiki/File:Mapa_de_Co

The Pacific region of Colombia is part of the Chocó Biogeographic Region, an area with some of the highest flora and fauna diversity indices in Colombia (Bernal, Gradstein, & Celis, 2015; Rangel-Ch, 2011) and considered to be among the World's biodiversity hotspots (Myers et al., 2000). Moreover, this highly biodiverse region

historically has been known for its alluvial deposits of gold and platinum (Leal León, 2009).

As a matter of fact, these mineral resources –particularly gold- have been at the center of the economic and settlement dynamics of the region since colonial times.

Black peoples in Colombia are descendants of former slaves, native to West Africa, who arrived during the colonial period (XVII Century) as workforce for the gold mines that had been established in the Western region of the country (COCOMACIA, 2002; Restrepo, 2002). Starting in the XVIII Century, Black peoples who obtained freedom - either via self-emancipation or later after formal slavery abolition in 1851- migrated en masse towards areas of what is now known as the Pacific Region, distant from national political and economic elites (Mosquera, Pardo, & Hoffman, 2002).

The Pacific Region historically has been isolated from Colombia's interior and relegated to the periphery by government policies (Asher, 2009; Oslender, 2007, 2016). According to the locals, the State's abandonment of Chocó- the department¹ where this research takes place- is apparent in a generalized lack or very poor coverage of utilities, health care, education, housing, and transportation for the local population, a situation that is even more severe for rural areas (Perea, 2012). The National Census data further supports this claim: 79.1% of the people in Chocó have their basic needs unmet, while the national rate is 27.78% (DANE, 2012); 18.5% of Chocó's population (15 years old or more) is illiterate, while the national rate is 5.5% (DANE, 2012). In fact, in some rural municipalities within the Pacific region, the illiteracy rate is above 34% (DANE,

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¹ Colombia is divided into departments which are regional units of government.

2012). Finally, the infant mortality rate (under 1-year deaths per thousand alive) for Chocó was estimated at 42.1 in 2015, compared to the National estimate of 17.1 (Bello et al., 2008).

In spite of this, the area has consistently been the target of outside interests (Echavarría Rentería & Hinestroza Cuesta, 2016). The undeniably strategic location of the area² and the richness of mineral and natural resources explain its appeal. Before the constitutional reform that occurred in the early 90s, the Colombian Government encouraged external investments and favored the establishment of large-scale, commercial enterprises in the Pacific region for timber and gold extraction. In particular, in the case of timber exploitation, these enterprises operated under State concessions of large expanses of land (Oslender, 2007; Vélez, 2009). It comes as no surprise that timber extraction and gold mining (both legal and illegal) have been the main drivers of landscape transformation in the Pacific Region (Andrade-C., 2011; Etter, McAlpine, & Possingham, 2008), as well as a source of social conflict in the area (Oslender, 2007, 2008).

The lowlands in the Atrato basin

The geographical focus of this thesis is the Northern, inland portion of the Pacific region, in which the Atrato river, along its 750 km-long riverbed (CODECHOCÓ & CORPOURABÁ, 2006), articulates a system of lowlands in its basin. The Atrato flows

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² This area connects the Pacific coast, the Western Andes, and the Urabá region which opens to the Caribbean Sea (Agudelo, 2005; COCOMACIA, 2002).

into the Caribbean Sea (South to North), and its watershed is characterized by swamp complexes, particularly in the mid and lower portions of the basin (De la Torre Urán, 2016).

The river system has played a determining role in structuring the life and settlements of the inland Black communities in this area (Asher, 2009; Oslender, 2001; Wade, 1997). People developed a subsistence-oriented set of livelihoods, based on a combination of fishing, hunting, agriculture, gathering, and small-scale artisanal gold panning for their everyday needs (COCOMACIA, 2002; Oslender, 2016; Wade, 1997). Surplus from fishing and agriculture is either exchanged between neighbors, or, as with gold, transported and sold in the markets available in nearby towns (Leal León, 2013). Importantly, Black and Indigenous communities have coexisted for centuries in these territories (Asher, 2009; Ng'weno, 2000; Restrepo, 2002; Wade, 1991).

Quibdó, the capital city of the Department of Chocó, has historically been one of the largest towns in the area. As such, it was the main place where commercial transactions between rural and urban areas occurred in the 20th Century. Nowadays Quibdó remains the main urban area in the Northern Pacific Region, where commercial activities, government social services, and political-administrative offices are located (Bello et al., 2008). In fact, despite the difficulties in communication and transportation, social and economic exchanges between urban centers and rural areas (i.e. riverine communities), in addition to kinship networks across these locations, are currently an essential part of the social dynamics of the Pacific region (Bello et al., 2008).

Organizational processes of Black communities in the Northern Pacific
In the late 1970s, missionary teams of the Diocese of Quibdó arrived in the riverine
communities of the mid-Atrato river basin (Perea, 2012), inspired by the principles of
liberation theology (Smith 1991, in Oyola Rios, 2017). The missionary teams were
known for creating base ecclesial communities, where people got together to reflect on
their daily lives and the issues they were facing within their communities (COCOMACIA,
2002; Perea, 2012). By the early 1980s, these reflections matured into the idea of
creating a formal organization of all the riverine communities in the mid-Atrato basin in
order to convey a stronger claim for their rights (COCOMACIA, 2002; Perea, 2012).

Parallel to this, starting in 1979, a partnership between the Dutch and the Colombian governments implemented the Agricultural Integral Rural Development Project (DIAR, Proyecto Desarrollo Integral Agrícola Rural) in the Atrato basin. Although the two external groups were working towards different goals, the convergence of DIAR and the missionary work in the region was instrumental for the organizational ambitions of the Black communities in the region (Restrepo, 2010).

The need for an organization gained strength and urgency when, by the end of 1983, timber companies arrived in the mid-Atrato with the objective of exploring the timber resources available in the area (COCOMACIA, 2002). Concerns expressed by local leaders from the lower-Atrato basin about the disastrous consequences left after such logging companies had established in their forests (COCOMACIA, 2002) set off alarms for riverine communities in the mid-Atrato basin.

The birth of ACIA

According to national law at the time, particularly Law 2 of 1959, the Pacific region fell under the category of a forest preservation zone, also known at the time as National Forests. These forests were State property and subject to exploitation by private concessions under license. By the time the mid-Atrato communities became aware of the imminent threat posed by the timber companies, these companies had already started the paperwork for obtaining a forest concession from the national government. Thus, by the end of 1986 a group of leaders from the region, supported by the missionaries, requested an urgent meeting with government officers hoping to interrupt the concession license by proving their ancestral possession of the forests. The maps created by experts as part of the DIAR project enabled them to prove their claim, and the timber concession was not approved.

Throughout 1986, the communities started creating a set of bylaws, elected a board of directors, and consolidated the paperwork for being granted legal status as an organization (COCOMACIA, 2002). One of the main challenges of the organizational process was involving the more than one hundred scattered communities that were part of the initiative. Thus a local committee was constituted in each of the communities so that all community members could provide input to the process (Perea, 2012). Later, input was brought to the inter-community meetings by the elected representatives of each of the committees. In May of 1987, the National government finally granted legal status to the Integral Campesino Association of the Atrato (ACIA, Asociación Campesina Integral del Atrato).

Once consolidated, ACIA convened a Campesino forum of the mid-Atrato basin by mid-1987 (COCOMACIA, 2002), which was attended by a broad range of stakeholders in the territories. The biggest achievement of this forum was the so-called Buchadó Agreement (Acuerdo de Buchadó), a document in which, for the first time, officers from the National Government explicitly recognized the ancestral possession of the forests by local communities. The document also stated the government's will to support Campesino communities, led by ACIA, in their ambition of taking the lead to manage the natural resources of the region. Although the Buchadó's agreement lacked the legal validity for transferring formal property rights over the land to the local communities, it was a major step forward for ACIA in gaining official recognition as ancestral inhabitants of the forests (Baquero, 2014; Restrepo, 2010).

It took a year of negotiations between the environmental offices and ACIA for the Buchadó agreement to be upheld and formalized. Finally, in mid-1988, an agreed-upon management plan formalized the agreement through which the Autonomous Regional Corporation for Sustainable Development of Chocó (CODECHOCÓ, for its acronym in Spanish) allocated 800.000 ha of the mid-Atrato basin to ACIA for its management, control, and monitoring (Baquero, 2014; COCOMACIA, 2002; Perea, 2012). In 1988, ACIA's board of directors moved out of their riverine communities to an office in Quibdó, from which they have been operating ever since.

ACIA's unparalleled political victory in terms of forest management helps explain why this organization is referred to as the strongest black peasant organization in the country (Asher, 2009; Oslender, 2016). Throughout its organizational process, ACIA

outlined for the first time links between a peasant identity and blackness in general, as well as the foundations of black peasants' specific relations to their territories (Oslender, 2016). In this sense, ACIA was a pioneer movement in territorial defense and ethnic rights of Black communities (Agudelo, 2005).

Changing the juridical status of Black communities during the 90s

During the first half of the 1990s, major unprecedented legal changes involving Black communities took place in Colombia. Processes and factors operating both at the local and global level help to explain the occurrence of this set of important changes.

The principles of "Sustainable Development" popularized by the Brundtland Report (WCED) in 1987 emphasized the need for more effective government strategies for the sustainable management of the forests around the world (Larson et al., 2010). On the other hand, local communities began to gain a positive reputation regarding conservation efforts (Adams, 2009; Ostrom, 1990). In turn, post-developmentalists argued for a greater emphasis on the power of "the local" (Adams, 2009; Asher, 2009; Larson et al., 2010).

At the same time, local communities around the world –particularly Indigenous movements- were increasingly pressuring central governments for the recognition of their rights (Larson et al., 2010; Larson & Soto, 2008). Specifically in Latin America, Indigenous movements allied during the 1980s with transnational advocacy networks that supported them in framing their claims in terms of territorial autonomy, self-determination, respect for customary laws, and other rights based on reconstructed

notions of identity (Asher, 2009). The declaration of Indigenous and Tribal Peoples Convention (No. 169) adopted in 1989 was the result of these bottom-up political pressures.

Meanwhile, during the last two decades of the 20th Century, Colombia was experiencing a convoluted social and political situation. Limited democratic participation, unequal distribution of land and income, and poverty had motivated the rise of different social groups -including guerrillas- in repeated protests against the government (Asher, 2009). Particularly, the 1970s and 1980s saw Colombian Black and Indigenous communities protesting against the state's disregard for their welfare and rights (Asher, 2009; Grueso Castelblanco, 2000).

In 1989, as part of a peace accord celebrated between the National Government and M-19 (a guerrilla group), the growing calls for a constitutional reform in Colombia were finally addressed. In 1990, a National Constituent Assembly was elected to undertake the challenge of creating a new Constitution, which included representatives from traditional political parties and ethnic, religious, and demobilized guerrilla groups. The claims of Black communities were represented by an elected Indigenous representative (COCOMACIA, 2002; Perea, 2012). Although the constitutional reform agenda did not include ethnic issues at its core, during discussions about popular participation representatives from Indigenous communities were able to express their own concerns as well as those of Black communities (Asher, 2009; Oslender, 2016).

The ethnic rights discourse under which the Indigenous discussions were held provided limited space for inclusion of Black peoples, who had traditionally been

imagined along racial rather than cultural/ethnic lines (Asher, 2009; Wade, 1997)³. Therefore, Black communities had to exercise additional political pressure on the Constitutional reform in order for their claims to be heard. With the last-minute inclusion of the Transitory Article 55 (AT 55, Artículo Transitorio 55) in the National Constitution of 1991, Black communities' struggles were addressed for the first time in the National legislation.

Two main achievements for Black communities resulted from the Constitutional reform. First, Black communities acquired legal recognition as an ethnic group in a country declared as a multiethnic, pluricultural nation. Second, AT 55 requested from the government the creation of specific legislation within the next two years to grant collective land rights to rural Black communities, as well as to protect their cultural identity and promote their economic and social development.

From AT 55 to Law 70

With the National Constitution in 1991 as a preamble, Law 70 of 1993 was promulgated as the first law specifically aimed at Black communities in Colombia. Through the promulgation of Law 70 of 1993 and Decree 1745 of 1995, Colombia became the first nation in the world to decentralize natural resource governance specifically targeting Black communities (Plant & Hvalkof, 2001; Sánchez Gutiérrez & Roldán Ortega, 2002). The emphasis placed by Black communities during the Constitutional reform on their

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³ According to Asher (2009), black communities went into the process of Constitutional reform in what she refers to as an "ethnic double bind": although blacks were being discriminated against or exoticized because of their "racial difference", they were still not considered sufficiently distinct from Colombia's *mestizo* (mixed-race) population -as Indigenous peoples were- to merit special legal status.

cultural, territorial, and identity rights embodies a first move toward the novel ethnic-framing for their claims. After declaring Colombia as a multicultural nation, the National Constitution of 1991 opened a political space for Black communities to articulate their claims in terms of ethnic rights language (Ojulari, 2015; Oslender, 2016). This process has been referred to in the literature as the "ethnicization" of Black communities in Colombia (Restrepo, 2004, 2013).

Having a Colombian citizenship premised on a cultural (ethnic) difference implied the need for a conceptual, intellectual and physical space in which Black communities could freely exercise and maintain such difference (Ng'weno, 2012). As a result, Black communities' demands for territory alludes to an economic, political, and social space where they should be able to autonomously exercise jurisdictional governance in multiple dimensions (Ng'weno, 2012). The spirit of Black communities' claims was not limited to equality and collective land rights; it was, instead, about the right to be Black, celebrating the cultural identity that being Black entails (Asher, 2009).

AT 55 included the mandate of appointing a Special Commission for Black communities (CECN, Comisión Especial de Comunidades Negras) with the purpose of developing the body of law through which the article itself was going to be operationalized. The commission had to be composed of representatives of Black communities' organizations, officers from the government, and academics. The heterogeneity and variety of social movements and organizations of Black communities posed an additional challenge for the commission's ability to come up with a single proposal for the law. Another important factor that played a role in the process of

drafting the law was the fact that Black communities' organizations also varied in terms of their experiences with political processes. In this sense, the influence of strong organizations with lengthy histories of participation in political arenas, such as ACIA in the Special Commission, was substantial and influential (Restrepo, 2010).

As soon as the National Constitution of 1991 was released, ACIA began a series of workshops in the communities of the mid-Atrato basin, informing their members about AT 55 (COCOMACIA, 2002). ACIA collected input from the different communities on what they thought the law should include. Taking advantage of its consolidated structure, organizational experience, and training, ACIA took the lead in developing a first draft of the law in partnership with two recently-formed local Black organizations – OBAPO⁴ and OCABA⁵ (Restrepo, 2010). This draft was later circulated among the other members of the CECN across the country for discussion and negotiation. Indigenous groups and other movements sympathetic to the Black communities' struggles were also invited to participate in these discussions (Asher, 2009). The final version of the law drafted by the CECN incorporated the input of all the different members of the commission, but it was clearly influenced by ACIA's discourse (Restrepo, 2010).

During the same period, the Chocó region was becoming a key target of national and international interests for environmental conservation (Asher, 2009). During the Rio Earth Summit on Environmental and Development held in 1992, the Colombian government presented the idea of turning the Pacific region into a laboratory in which a

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⁴ Organization of Popular Neighborhoods and Rural Communities of Chocó (Organización de Barrios Populares y Comunidades Rurales del Chocó)

⁵ Campesino Organization of the lower Baudó (Organización Campesina del Bajo Baudó)

regional development strategy based on biodiversity conservation could be launched (Oslender, 2016). This project became one of the first operations funded by the Global Environmental Facility (GEF), a multibillion-dollar fund created after the RIO Summit, administered by the World Bank. These World Bank funds supported the process through which the AT 55 was made into law in the form of Law 70 (Ng'weno, 2000, 2012), as well as the process of titling ethnic lands and the five-year biodiversity conservation program developed by the national government called Proyecto Biopacífico (Asher, 2009).

Law 70/1993 and Decree 1745/1995

In August of 1993, AT 55 finally became a proper law (Law 70 of 1993), also known as the Law of Black communities. The Law outlines the procedures that Black communities must follow to get collective rights over the land (art. 8-18). As part of this process, a Black community is required to create a Community Council as its highest administrative entity and the authority over its titled territory (art. 5). According to the Law, the collective territories are inalienable, immutable, unmortgageable, and unrentable (art. 7). Additionally, the Law emphasizes that property over the soils and forests in these territories requires that their social and ecological functions be respected (art. 58 superior; law 70 art. 6). The social and ecological functions for these territories include that forest exploitation should guarantee the persistence of the resource and management of soils should account for their inherent fragility (art. 6; num a and b). In terms of resource governance, two chapters of the Law appear to be

critical. First and foremost, Chapter IV provides general guidelines for the use of collective lands and the protection of natural resources and the environment. Second, Chapter V refers to mineral resources in the territories and how the exploitation of these should be undertaken.

Colombian law requires the promulgation of Regulatory Decrees (rules) through which such mandates can be operationalized. To date, only for chapter III of Law 70, the one pertaining to the process of collective titling, have complete rules been written via Decree 1745 of 1993. Rules have not been written for the chapters referenced above as critical for resource governance (Chapter IV: Land use and protection of natural resources and the environment and Chapter V: Mineral resources).

From ACIA to COCOMACIA: from paper to practice

When Decree 1745 of 1995 was released, one of the major concerns of ACIA was to advance the titling process of the multiple communities belonging to the association (Perea, 2012). This concern was justified given the amount of time that would be required for titling each community individually, particularly considering the paperwork and bureaucratic procedures needed (COCOMACIA, 2002). In the end, the choice of applying for a single *global title* - including all the communities that were part of the process- was approved by consensus (COCOMACIA, 2002; Perea, 2012). The final resolution was also rooted in the idea of strengthening the union and cooperation among the communities in ACIA (COCOMACIA, 2002) while benefiting all communities

equally. Nevertheless, the application process established by Decree 1745 for territories of more than 7,000 families was anything but simple.

By the end of the 1980s, the National Government designed the Forestry Action Plan for Colombia (PAFC, Plan de Acción Forestal para Colombia), which included the Resource Management Program (PMNR, Programa de Manejo de Recursos Naturales) aimed at stopping natural resource degradation and promoting sustainable management (DNP, 1994 in COCOMACIA, 2002). Community participation was incorporated into the planning, execution and monitoring of the program through the creation of Regional Committees in the early 1990s.

The Regional Committees played a substantial role in supporting the processes of collective titling in local communities (COCOMACIA, 2002) by providing a formal meeting place among representatives of the local communities and the State. Second, they provided training for leaders of local communities about Law 70/1993. Third, they supported data collection needed by local communities when applying for title. During the first Regional Committee, held in April of 1996, it was decided by consensus that ACIA would have priority in the trainings and data collection because the organization covered the largest territory and contained the largest number of communities in the region. Additionally, two other elements made ACIA's case particularly interesting and complex: on the one hand, the territories comprising ACIA were adjacent to multiple Embera-Wounaan Indigenous communities; second, the territories to be titled by ACIA were under a total of five municipal jurisdictions at the time (nowadays seven) and two department jurisdictions.

After almost a year of intensive participatory data collection on biophysical characteristics of the territories, ethno-historical background of the communities, demographics, and traditional productive practices (COCOMACIA, 2002; Perea, 2012), a final version of the document to be presented to the Colombian Institute for the Agrarian Reform (INCORA, for its acronym in Spanish), the office in charge of land titling, was approved in a General Assembly held in March of 1997. In this assembly, it was decided that ACIA would become COCOMACIA, or the Major Community Council of the Campesino Integral Association of the Atrato. Nine months later, in December of 1997, INCORA formally granted the collective title to COCOMACIA.

The Armed conflict in the Atrato

Although the origins of the armed conflict in Colombia date back to the 1960s, and the major expansions of the guerrilla groups throughout the country took place in the 1970s, it was only in the 1980s that the guerillas entered the Atrato (Agudelo, 2005; Bello et al., 2008; COCOMACIA, 2002; Oyola Rios, 2017). Violent disputes between these groups for territorial control ended with the Revolutionary Armed Forces of Colombia - People's Army (FARC-EP, Fuerzas Armadas Revolucionarias de Colombia - Ejército del Pueblo) becoming the main actor in the region. During the 1980s and early 1990s, FARC-EP sought to strengthen their territorial control by imposing their ideology on local communities by punishing people who violated their newly established norms (Oyola Rios, 2017). Nevertheless, because FARC-EP's presence coincided with the absence of military troops in the region (Oyola Rios, 2017), this period was characterized by less

combat and fewer violent confrontations.

The dynamics of the armed conflict in Colombia drastically changed during the 1990s. On one hand, the aggressions of FARC-EP against the National military forces intensified (e.g. takeover of military bases, military coups, and massive kidnappings); on the other hand, the paramilitary forces, previously scattered throughout the country, consolidated into a single unified force named United Self-Defense of Colombia (AUC, Autodefensas Unidas de Colombia) (Agudelo, 2005). Consequently, during this decade military forces arrived in the Pacific region, where they developed contra-insurgency operations against FARC-EP and established checkpoints throughout the Atrato river and control posts in the local communities. Paramilitary groups entered the region in 1996 (Oyola Rios, 2017). As a result, violence escalated in the territories to unprecedented levels.

Between 1996 and 1997, paramilitary groups imposed a regime of terror on civil society (Agudelo, 2005; Flórez López & Millán Echeverría, 2007). In turn, massive displacement of local communities from their territories began in the second half of the 1990s (Asher, 2009; COCOMACIA, 2002; Flórez López & Millán Echeverría, 2007; Perea, 2012). According to some authors, in addition to the violent disputes with FARC-EP over the control of privileged geo-political strategic locations (Agudelo, 2005; Baquero, 2014), the paramilitary also attempted to destroy the community organizations of Indigenous and Black communities (Flórez López & Millán Echeverría, 2007). This included coercing locals to join the paramilitary project (Baquero, 2014; Flórez López & Millán Echeverría, 2007). All in all, the escalation of violence in the Atrato at the hands

of paramilitary groups was constant between 1996 and 2001. Negligence on part of the military troops aggravated the situation for civil society (Oyola Rios, 2017), particularly since there was no other support from or presence of the State (Bello et al., 2008; Perea, 2012).

Notwithstanding this situation, the paramilitary project was weak in the Pacific lowlands (Baquero, 2014; Flórez López & Millán Echeverría, 2007). Some suggest this had to do with the robustness of the Indigenous and Black community organizations in the territories, which resisted the systematic violence of the paramilitary through their Reservations and Community Councils (Baquero, 2014). Throughout the 2000s, COCOMACIA, in alliance with the Diocese of Quibdó, assisted the return of several populations to the territories from which they were displaced (Perea, 2012) and implemented additional strategies to counter displacement and ameliorate the situation for local communities (Oyola Rios, 2017).

The armed conflict in the Pacific lowlands had consequences that went beyond the evident aggressions of assassinations, massacres and displacement. The escalation of the armed conflict in the Pacific region coincided with the first processes of collective titling, weakening the consolidation of Community Councils and other social movements in the region (Villa, 2004 in Baquero, 2014; Echavarría Rentería & Hinestroza Cuesta, 2016). Over the last decade, violence related to guerrillas and paramilitary groups has waned. However, the existence of illegal economic activities in the territories (particularly around gold mining and timber extraction), the emergence of newly constituted armed groups, an increase in selective assassinations of local

leaders, and the still limited or nonexistent response from the National Government in addressing these issues suggest that conflict in the region is far from disappearing (Echavarría Rentería & Hinestroza Cuesta, 2016; Martínez Basallo, 2010; Vélez, 2011). This is aggravated by the fact that Black communities live in a landscape of overlapping and conflicting legal pluralities (Weitzner, 2017), with no clear distinctions between raw law (i.e. might is right), state law, and/or ancestral law. Particularly worrisome is the evidence of circumstances in which the state law and raw law have contradicted ancestral law and authority (Weitzner, 2017).

Current situation of Community Councils in the Pacific

After more than 20 years of implementation of the law for collective titling, 182

Community Councils hold collective title over land in Colombia, involving 71,442 families grouped into 1,569 Black communities (INCODER 2015, in Echavarría Rentería & Hinestroza Cuesta, 2016). Some evidence suggests that the collective titling process of Black communities and constitution of Community Councils has promoted the creation of new rules for the management of their territories (Vélez, 2011). These rules, supported by legal title, have enabled Black communities to guard their territories against encroachment by intruders in certain situations (Martínez Basallo, 2010; Vélez, 2011), providing these communities with more secure rights over the land and a more secure resource base (Peña et al., 2017; Vélez, 2011).

However, despite the legal changes, black populations continue to suffer greatly from many socio-economic problems related to health, education, and employment,

among others (Ng'weno, 2012; Pirsoul, 2017). In the absence of other economic opportunities, and notwithstanding the low access to formal timber and gold markets (Peña et al., 2017), rural Black peoples have increased their participation in these extractive economies (Martínez Basallo, 2010), which exerts a greater pressure over these particular resources through illegal activities. Some authors suggest that incorporating Black communities into the Colombian state governance system increases the State's control over territories previously marked by a very low State presence and allows for increased capitalist investments in remote regions of the country (Pirsoul, 2017). Inevitably, after being granted land titles, Community Councils and their territories have become hosts of legal and illegal markets (Asher, 2009), for good or for bad.

Some authors have pointed out the difficulties in interpreting the law and the consequential challenges of teaching communities the law and decrees for collective titling (Martínez Basallo, 2010; Restrepo, 2002). Baquero (2014) has gone further to suggest that the prescriptions of these laws have severely compromised accountability in Community Councils. First, the organizational structure of Community Councils prescribed by the law does not include external oversight over the elected representatives or the board of directors, which are the major decision-makers within the organization (Baquero, 2014). Second, there are issues of representation and participation regarding decision-making within Community Councils, as the general assembly -the only instance where all members of the Community Council participate-has limited voice in important decision-making (Baquero, 2014). This lack of

accountability intensifies the risk of corruption in local leaders and representatives (Baquero, 2014).

On top of this, the legal figure conceded to Community Councils by law constrains them financially. In contrast with Indigenous resquardos -the other ethno territorial figure in Colombia-, Community Councils do not receive direct fiscal transfers from the state and are not recognized by law to have the legal status of public entities; furthermore, inhabitants of Community Councils' territories cannot use their land as collateral because of the collective and unalienable nature of the title. Thus, Community Councils have no access to credit and lack financial autonomy, which hinders monitoring and autonomous rule enforcement (Baquero, 2014; Offen, 2003; Vélez, 2011), among other things. This has led to a heavy dependence on external financial and logistical resources from NGOs, municipalities, and other state offices. On one hand, the reliance on external support for rule enforcement requires attention, as it might undermine local governance with time (Baquero, 2014; Vélez, 2011). On the other hand, the financial dependence has led local leaders and elected representatives of the rural areas to leave the territories and moving to cities in the search 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 (Baguero, 2014).

In fact, within Community Councils, power struggles have arisen between leaders and non-leaders as a result of conflicts of interest and resentment (Lobo, Vélez, &

Puerto, 2016). Relatedly, conflicts and disagreements regarding individual vs. collective property regimes have been reported (Martínez Basallo, 2010). Private property is still exercised informally in these territories (Vélez, 2011), and land transactions in informal markets are taking place between community members and outsiders, in spite of the unalienable nature of collective territories (Martínez Basallo, 2010; Vélez, 2011).

Ultimately, the position of the Colombian State towards Community Councils has seemed unclear and inconsistent. While the state seems to promote local, culturallysensitive, and ecological development for Black communities in the law, it continues to support an extractive capitalist industry in the territories inhabited by these communities (Pirsoul, 2017). The Colombian state's good will has fallen short, 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 (Baguero, 2014; García, Tavera-Escobar, Vieira, Rincón, & Rentería, 2014; Offen, 2003; Pirsoul, 2017). For some, this has to do with a widespread unwillingness of Colombian state agencies to lose control over decisions (García et al., 2014). In addition to this uncertainty, there is evidence of enforcement issues for regulated mechanisms; as an example, the mechanism of Prior Consultation has been disregarded in multiple occasions by officers and agencies of the state. As a matter of fact, court decisions are rarely enforced in Colombia, especially the rulings in favor of local communities (Pirsoul, 2017; Walter & Urkidi, 2016; Weitzner, 2017).

Environmental Governance in Colombia: situating Community Councils

The distribution of powers and functions between central, regional, and local authorities in Colombia change significantly with the legal reforms that occurred during the 1990s.

Following a general trend of decentralizing governance within the country, Law 99/1993 was promulgated for re-organizing natural resource management and environmental conservation. Law 99/1993 indicates that environmental management in Colombia is to be done according to a decentralized, democratic and participatory fashion involving the State, the citizenry, NGOs, and the private sector. To organize these multiple stakeholders, Law 99 created the National Environmental System (SINA, Sistema Nacional Ambiental).

At the head of SINA is the Ministry of Environment and Sustainable Development (MADS, Ministerio de Medio Ambiente y Desarrollo Sostenible), in charge of coordinating natural resource and environmental policies and regulations towards sustainable development (Art. 2). Five scientific agencies are affiliated with MADS: the Alexander von Humboldt Institute for Research (IAvH, Instituto de Investigación Alexander von Humboldt), the Institute for Meteorology and Environmental Studies (IDEAM, Instituto de Estudios Ambientales y Meteorología), the Institute for Environmental Research of the Pacific (IIAP, Instituto de Investigaciones Ambientales del Pacífico), the Institute for Amazonic Research (SINCHI, Instituto de Investigaciones Amazónicas), and the Institute for Marine and Coastal Research (INVEMAR, Instituto de Investigaciones Marinas y Costeras).

In the hierarchical structure of SINA, under MADS are the Autonomous Regional Corporations (CARs, Corporaciones Autónomas Regionales), also created by Law 99 (Title VI). These corporations are the highest environmental authority within the boundaries of their respective jurisdictions, performing tasks of evaluation, control, and monitoring at the regional level. Specifically, CARs coordinate the implementation of environmental plans with national government, departments and municipalities (Blackman, Morgenstern, & Topping, 2006). Two CARs have overlapping jurisdictions with COCOMACIA: CODECHOCÓ and the Autonomous Regional Corporation for Sustainable Development of Urabá (CORPOURABÁ, for its acronym in Spanish).

After Law 70 of 1993 was passed, Community Councils were expected to become the main environmental authorities over their territorial jurisdictions. According to the law, these entities are responsible for establishing planning tools and bylaws to orient natural resource management in their territories. Nonetheless, despite this clear mandate to officiate as environmental authorities, how Community Councils are to coordinate actions with other authorities concerned with environmental issues, such as municipalities or CARs, is unclear (García et al., 2014). In addition to this, Community Councils lack operational budgets (Baquero, 2014; Offen, 2003), which severely constrains their performance as environmental authorities.

Finally, Community Councils, as well as any other local community in Colombia, are granted by law the right of Prior Consultation. Decree 1320 of 1998 established the mechanism of Prior Consultation as a mandatory process by which local communities are consulted before any project is developed in their territories, and even before

permits and licenses for projects are granted. This mechanism gains additional validation for Indigenous and Black communities, who are legally entitled to the land. Therefore, after Law 70/1993, anyone interested in exploiting natural resources in Community Councils' lands must obtain direct permission from the communities collectively entitled to the land (Oslender, 2016). Likewise, if the intended intervention entails compensation, this is to be delivered to the entitled communities. In fact, compensations and resource extraction concessions have become a common source for funding the operational costs of Community Councils as environmental authorities. However, this situation clearly poses conflicts of interests for resource governance (García et al., 2014).

CONCEPTUAL FRAMEWORK

Institutional Analysis

Institutions shape and condition the patterns of interaction between individuals and/or groups and the results that can be obtained out of such interactions (Berman, Quinn, & Paavola, 2012; North, 1990; Ostrom, 1992; Ostrom & Basurto, 2011). Given that social groups develop institutions to use and govern natural resources, studying institutions is key for understanding the ways in which groups face the choices entailed by such endeavors, particularly if they are tailored towards sustainability. Importantly, however, the study of institutions in resource governance is not exhausted by exploring the rules and norms themselves, but it requires attention to the enforcement mechanisms for the prescriptions (Berkes, 2004).

According to Crawford and Ostrom (1995), institutions -or institutional arrangements- include strategies, norms and rules. *Strategies* are the plans made by individuals in a situation about actions they undertake to achieve outcomes, given their information about the basic structure of the situation; *norms* are socially-acquired prescriptions about actions or outcomes that are not focused primarily on short-term material payoffs to self; and *rules* are statements containing prescriptions similar to norms but with an additional, assigned sanction if forbidden actions are taken and observed by a monitor (Crawford & Ostrom, 1995; Ostrom & Basurto, 2011).

Additionally, institutions can be informal or formal. *Informal institutions* refer to rules, norms, guidelines, and codes of conduct, usually unwritten, that are created, communicated, and enforced outside officially sanctioned channels (Helmke & Levitsky,

2006). *Formal institutions* constitute the set of prescriptions, rules, and procedures that are created, communicated, and enforced through channels that are widely accepted as official. Formal and informal institutions permanently coexist, interact, and relate to each other (Helmke & Levitsky, 2006; North, 1990; Ostrom, 1990).

Institutions can also be grouped into two different categories depending on the extent to which they are put into practice: *rules-in-use* and *rules-in-form* (Ostrom, 1992, 2013). In any particular setting, formal rules may exist but they might not be followed or even recognized by the people; these are the *rules-in-form* (Ostrom, 2013). The *rules-in-use*, in contrast, comprise the set of institutions actively followed by people, whether formal, informal or an amalgam of both.

Along with the social groups to which they belong, institutions undergo a constant process of change (Cleaver, 2001; North, 1990; Ostrom, 2013). Processes of institutional change can occur consciously or unconsciously (Ostrom & Basurto, 2011). Over time, people change their perception of reality, and in turn, their behavior; with time, changes in behavior aggregate and regularize, giving birth to new informal institutions (Schmid, 2004). When there is consciousness associated with these regularized behaviors, individuals or groups can pressure for formal institutional change (Schmid, 2004). However, ideologies, objectives, and values, over which informal institutions such as norms are primarily built, can also change with time and be learned unconsciously (Schmid, 2004). Simply speaking, institutions represent *provisional* agreements on how to accomplish tasks (Agrawal & Gibson, 1999).

Nestedness: levels of analysis for actions, institutions, and rights

The diversity of regularized social behavior that we observe at multiple scales is constructed, I will argue, from universal components organized in many layers. In other words, whenever interdependent individuals are thought to be acting in an organized fashion, several layers of universal components create the structure that affects their behavior and the outcomes they achieve.

(Ostrom, 2005a, p. 6)

Any situation involving resource extraction or harvesting is nested hierarchically in different levels, and equally nested are the institutions that affect the structures of these situations (Ostrom, 1990, 2005a; Schmid, 2004). Kiser & Ostrom (2000) identified three analytical levels for the study of institutions: operational, collective-choice, and constitutional; later, Ostrom (2005) added the meta-constitutional level. Operational rules are the ones affecting daily decisions made by participants in a specific setting. Collective-choice rules determine who is eligible to be a participant and the rules to be used in changing operational rules. Finally, constitutional rules determine who is eligible to be a participant and the rules to be used in crafting collective-choice rules (Kiser & Ostrom, 2000; Ostrom, 2005b).

Operational situations and rules are nested in collective-choice situations and rules, which in turn are nested in constitutional situations and rules (Ostrom, 1990, 2005a). Likewise, the structure of operational situations is conditioned by the institutions at the collective-choice level, which are at the same time framed in constitutional and meta-constitutional institutions. This is referred to as the *nestedness* of levels of actions and rules. Needless to say, the notion of institutional *nestedness* conjures up the

overlapping and polycentric forms of natural resource governance that are built in practice (Meinzen-Dick & Pradhan, 2001).

Institutions, property rights, and decision-making

Schlager and Ostrom (1992) emphasize the important distinction that needs to be made between rules and rights despite their frequently being used as interchangeable terms. "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" (Schlager & Ostrom, 1992, p. 250). Rules prescribe what rights are authorized and how those rights are exercised, i.e., what actions can be undertaken in specific situations. Property rights are particularly important in natural resource management. These provide the basis for allocating benefits from and duties, obligations, and responsibilities to the resource system among different actors participating in its management. "For every right an individual holds, rules exist that authorize or require particular actions in exercising that property right" (Schlager & Ostrom, 1992, p. 250).

There are two important categories in the literature for conceptualizing property rights. Firstly, *de jure* rights are the rights that are established and protected by the state within the realm of formal law. Secondly, *de facto* rights consist of patterns of interaction established, legitimized and validated outside the formal realm of law (Larson et al., 2010). These categories are particularly useful and relevant when studying decentralization policies, as some of these policies entail a transition from *de*

facto rights to de jure collective rights over the land with important consequences for resource management (Larson & Soto, 2008).

There is a key distinction between *de jure* rights-*de facto* rights, and formalinformal institutions. The first binary refers only to rights and the second one to institutions, a difference that has been previously discussed in the document. Even so, rights and institutions are closely connected: rights presuppose the existence of a rule that authorizes them (Schlager & Ostrom, 1992). While all de jure rights are authorized by a formal institution, not all formal institutions necessarily authorize rights that are de jure in nature. For instance, COCOMACIA's internal bylaw constitutes a formal set of institutions that are not enforced or protected by the state. In that sense, the rights authorized by the bylaw are not de jure, but they are authorized by formal rules. Meanwhile, the *de facto* nature of rights refers to a state of affairs that is true in fact, but does not have to be officially sanctioned (Lewkowicz & Metelska-Szaniawska, 2016). Rights that fulfill the condition of being actually operative (effective) may be authorized by institutions of varying nature - formal or informal (Lewkowicz & Metelska-Szaniawska, 2016). In synthesis, while the qualifiers formal-informal constitute a binary of opposites, the categories of de jure-de facto do not represent antonyms (Lewkowicz & Metelska-Szaniawska, 2016).

Property rights play a central role in the governance of natural resources, conveying authority and shaping the incentives of stakeholders (Meinzen-Dick & Knox, 1999; Ostrom, 1999; Schlager & Ostrom, 1992). Furthermore, the literature suggests that property rights can be important for equity and justice. For instance, it has been

argued that the registration and integration into national, unified property systems enables the –poor- majority to gain access to the benefits of capitalism (de Soto, 2000). However, this is not to say that only *de jure* rights deserve attention for studying natural resource governance. Analyzing the links between the exploitation of natural resources and land tenure requires attention to both formal and informal institutions, as well as to the bundle of *de jure* and *de facto* rights that govern the use of resources (C. C. Gibson et al., 2002).

Right-holders, regardless of whether the source of their rights is the law or consuetudinary agreements, are authorized to undertake certain actions depending on the rights they hold, but not all authorized actions are of the same kind. Ostrom & Schlager (1992) identified what they consider the five most relevant rights in common-pool resources: access, withdrawal, management, exclusion, and alienation rights (see table 1). These authors argue that the level at which these rights operate is also important. Property rights, as well as the institutions that prescribe them, operate at nested levels of action. Access and withdrawal rights belong to the operational level, while management, exclusion, and alienation rights operate at the collective-choice level (see table 1).

The distinction between authorized actions -and therefore, rights- at an operational and a collective-choice level is crucial for this study: "it is the difference between exercising a right and participating in the definition of future rights to be exercised. The authority to devise future operational-level rights is what makes collective-choice rights so powerful" (Schlager & Ostrom, 1992, p. 251). Moving from

operational to collective choice level offers the capacity to participate in *decision-making* on resource governance.

Table 1. Property rights for common pool resources, based on definitions by Schlager & Ostrom (1992).

Right	Description	Level
Access Withdrawal	The right to enter a defined physical property The right to obtain the "products" of a resource	Operational
Management	The right to regulate internal use patterns and transform the resource by making improvements	Collective- choice
Exclusion	The right to determine who will have an access right, and how that right may be transferred	
Alienation	The right to sell or lease management and/or exclusion rights	

Institutions and decentralization

Decentralized natural resource governance regimes have been established with the aim of increasing participation and accountability in decision-making by bringing it closer to the ones who are most affected by governance (Lemos & Agrawal, 2006).

Decentralization policies –particularly of forest governance- became popular and widespread worldwide under the core assumption that local authorities and communities have potentially more precise information and knowledge about natural systems and resources, and therefore they are likely to make better decisions and/or develop better policy solutions (Larson & Soto, 2008; Lemos & Agrawal, 2006). It is further argued that resource users frequently deem local rules more legitimate because these rely on local knowledge and trust among neighbors (Ostrom, 1990, 2010). Moreover, decentralization policies that include formalization of property rights have also been proposed as a way of reducing poverty (Sjaastad & Cousins, 2009). However,

decentralization has proven not to be a panacea (Paulson Priebe et al., 2015; Wright et al., 2016).

To date, the literature on decentralization has focused on assessing performance in single cases, comparing cases across different settings, and finding emergent patterns when assessing multiple cases across the world under a set of common criteria. For these purposes, an ample variety of frameworks has been used. It is important to keep in mind that decentralization policies have evolved in different ways, by different means and mechanisms, and across widely diverse settings around the world. A review of this literature enabled me to identify central topics and concepts related to the notion of institutions that are key for understanding the findings of this study.

Decentralization from a governance perspective

The literature on decentralization suggests that the performance of decentralized governance systems is likely to depend, among others, on three types of context-specific factors: (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).

For the first of these factors, two main characteristics of the resources to be governed are highlighted in the literature. First, natural resources differ in their

distribution patterns and dynamics across space and time, making scale a crucial element to consider for decision-making (Folke, Pritchard, Berkes, Colding, & Svedin, 2007; Larson, 2003; Lovell, Mandondo, & Moriarty, 2003). Earlier studies on common-pool resource management highlighted the importance of characteristics such as capacity for storage and mobility of the resources (Schlager, Blomquist, & Tang, 1994). These features are particularly important in the case of fish, which are a fugitive (highly mobile) resource and, in the case-study, lack infrastructure for storage. Second, natural resources are valued differently by stakeholders, and such valuation affects the incentives (or disincentives) for resource management (C. C. Gibson & Becker, 2000; Larson, 2003). Biophysical, cultural, religious, economic, political and historical factors can shape perceptions of scarcity and importance that people attribute to certain resources, which in turn motivate (or not) investments in strong institutions for sustainable management (Becker & León, 2000; Bremner & Lu, 2006; C. C. Gibson et al., 2002; Larson & Ribot, 2004; Tucker, Randolph, & Castellanos, 2007).

The second and third factors are deeply intertwined when interpreted from a governance⁶ perspective. 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-actors dimension and the

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⁶ Importantly, governance and management are not synonymous. While management involves operational decisions to achieve specific outcomes, governance refers to the broader processes and institutions through which societies make decisions that affect the environment (Oakerson, 1992 in Armitage et al., 2012). The perspective on governance for this study, then, recognizes the importance of the complexity and dynamic nature of decision-making processes in which multiple actors are involved.

accommodative nature of the process (i.e., the belief that governance should accommodate the interests and expectations of the majority). In that sense, a governance perspective emphasizes on the fact that central governments are no longer the exclusive nor the most important source of decision-making in environmental issues (Armitage, De Loë, & Plummer, 2012; Lemos & Agrawal, 2006). Instead, the environment is governed through hybrid environmental governance strategies in which a wide array of new actors plays critical decision-making roles.

While the first initiatives of decentralization around the world incorporated existing authority structures into the formal process of the exercise of authority, more recent approaches of decentralized environmental governance involve new organizational entities (Lemos & Agrawal, 2006). The land tenure reform that occurred with decentralization in Latin America included formal recognition of the rights of historically-settled ethnic communities to management of their land under the grant of collective property rights over the land (Larson et al., 2010). These policies have required local communities to form new entities to represent the beneficiaries of the legal tenure rights granted by the central government. Essentially, most decentralized governance systems in Latin America have relied on processes of self-organization of local resource users (Larson et al., 2006; Larson & Soto, 2008; Meinzen-Dick, 2007). This leads to the drawing of new lines of institutionalized authority for the new organizations of community-based user groups. These emergent entities have new roles within the political landscape and governance system that communities must learn to navigate (Larson et al., 2015). Some of the biggest challenges faced by these entities relate to the process of constructing and earning legitimacy and accountability within their political landscapes (Andersson et al., 2014; Hayes, 2007; Larson et al., 2015; Larson, Pacheco, Toni, & Vallejo, 2007; Ribot et al., 2006).

The concepts of accountability and legitimacy are closely connected in the literature of governance through institutions. Accountability relates to the need to control 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 fairness, correctness or rightfulness of power relations (Beetham, 1991; Matti, 2009 in Sandström, Crona, & Bodin, 2014). For power to be deemed legitimate in a governance system, it must be acquired and exercised in accordance with the formalized legal codes, as well as with contextually relevant informal rules (such as shared norms, values and beliefs) (Beetham, 1991: 16 in Suškevičs, 2012). In a multi-level governance⁷ system involving emergent community organizations as key stakeholders, legitimacy is not at stake only at the informal or formal realm of the 'rules of the game', but also at the interplay of both.

Studies of decentralized governance regimes in Latin America also suggest that collaboration and coordination among actors who have a stake in the governance of the resource are key to achieve effective governance arrangements (Andersson & Ostrom, 2008; Wright et al., 2016). Local decision-making by an entity that has earned authority has to be combined with other policies and institutions at higher levels of governance

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⁷ 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).

(Larson et al., 2007). As such, the effectiveness of decentralization depends on constructing accountable institutions at all the different 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 becomes necessary to delineate responsibilities and functions of the decision-making bodies and entities part of the governance system (Suškevičs, 2012). Knowing who is responsible for what and who is held accountable by whom is a necessary condition of any effective accountability mechanisms in co-governance. Conversely, difficulties in defining and/or sharing responsibilities between different actors may reflect poorly conducted decentralization (Ribot et al., 2006).

Considerations about power and governance

Institutional change has been a research topic addressed by a wide variety of disciplines and approaches (e.g. Cowie & Borrett, 2005; Daedlow, Beckmann, & Arlinghaus, 2011; De Koning & Cleaver, 2012; Gutu, Wong, & Kinati, 2014; Haapala & White, 2016; Norris, Brown, & Batie, 2002; Ostrom, 1990, 2005b, 2013; Schmid, 2004). The multiple frameworks all emphasize processes through which institutional change takes place. In that sense, they all analyze processes of change, explicitly addressing the interaction between formal and informal institutions and the different institutional levels. However, as some authors have pointed out, the frameworks for analysis of institutions fall short in addressing power issues (Agrawal & Ostrom, 2001; Clement, 2010; Kashwan, 2017).

A similar critique has been made of the literature on decentralization, particularly when framed around natural resource conservation and management. In this literature, *power* is an abstractly discussed concept that tends to not be defined by the authors (Clement, 2010; Gaventa & Cornwall, 2008; Kashwan, 2016, 2017; Raik et al., 2008). If decentralization implies "rearranging institutional structures, redefining rules, reformulating relationships, and redistributing power" (Raik et al., 2008, p. 729), a clear notion of *power* is necessary at the core of studies focused on this type of policy.

Within the natural resource management literature, power is commonly understood as something that certain individuals and/or entities have, while others do not (Raik et al., 2008). This view is defined as the first dimension of power (Lukes, 2005) and is rooted in Dahl's (1957, p. 203 in Raik et al., 2008) traditional definition: "A has power over B to the extent that s/he can get B to do something that B would not otherwise do". Also known as *power as coercion,* this view conceptualizes power as the result of conflicts between actors who either become winners or losers in the face of clearly recognized –and contested- issues (Gaventa & Cornwall, 2008). This perspective provides little to no attention to which voice or knowledge-base is represented in the decision-making process, nor to the ways in which different forms of power affect how problems come to be framed in these processes (Gaventa & Cornwall, 2008).

Raik et al. (2008) proposed the realist view of power as a suitable approach for analyzing decentralized environmental governance schemes. This view is based on identifying enduring structural preconditions that shape human interaction. This

approach calls attention to the ability of individuals to maneuver and make choices within structured social relations (Raik et al., 2008). Furthermore, the realist view acknowledges that individuals, though preconditioned by structured social relations, might also transform these structures, for good or bad (Raik et al., 2008). The realist view of power conceives power as "the socially structured capacity to act" (Raik et al., 2008, p. 737). This is the definition of power I have chosen for this study.

Combining institutions, governance and power to study decentralization

This study aims to provide a contextualized analysis of inland fisheries' institutions in the Colombian Pacific, brought about *by different actors through negotiation in practice*. Community Councils in the Colombian Pacific became key stakeholders in resource governance after being granted collective property rights over the land. However, the appropriate design and enforcement of rules to use and manage natural resources can sometimes be more important than the type of property rights existing over the resource (C. C. Gibson et al., 2002; Tucker et al., 2007). In particular, evidence suggests the importance of norms, informal institutions, and *de facto* rights in contexts such as the one under scrutiny. These institutions are especially important for groups that are targets of decentralization policies because they have historically inhabited the land, making it more likely for them to have ingrained customary institutions for resource management (Bremner & Lu, 2006; C. C. Gibson et al., 2002). Even then, the emergence of new actors as part of environmental governance systems cannot be understood as the disappearance of the state in environmental decision-making. The

state should continue to be a major stakeholder in environmental governance, particularly in schemes built around common-pool resources (Baker & Eckerberg, 2014; Mansbridge, 2014). I situate the analysis of the case study in the context of the broader governance system to which it belongs.

This study stresses the need to unpack the notion of decentralization. In the literature, it is implied that decentralization entails a re-distribution of decision-making responsibilities in the governance of natural resources which empowers local communities and/or governments. However, decision-making takes place in different moments and for different purposes for resource governance. According to Agrawal & Gibson (1999), three key decision-making moments are crucial for understanding the exercise of authority to effectively govern resources at the local level. The first is negotiation between individuals of a community on the use, management, and conservation of their resources. Second is the different attempts to design, and later implement, the rules that they agree upon throughout the negotiations. Third, decisions are made to resolve conflicts or disputes that may occur as part of the implementation of such rules. Within these confines, decentralizing decision-making involves more than a single process, which warrants a more detailed examination of each of the decision-making moments.

All three moments of decision-making are structured by the rules and norms ingrained in the community. They are also highly influenced by the power dynamics existing within social groups and between the community and other entities making decisions on resource governance in the same territories. Essentially, all local

interactions occur within the context of larger social forces and, as such, analyses of only local-level phenomena are insufficient to explain the dynamics around resource governance at the community level (Agrawal & Gibson, 1999). This research focuses on exploring the stages of decision-making around the design and implementation. More specifically, I focus on fisheries' institutions in the case study, explored under the light of its broader governance system and its intrinsic power relations.

By doing so, I attempt to overcome two important critiques of institutional analyses of decentralization. Firstly, little to no mention of power issues in analyses of decentralization policies, and secondly, limited attention given to contextual factors and dynamics surrounding the implementation of these policies. For the former, I have described and adopted the *realist view of power*. For the latter, I have developed a detailed context for the case study based on primary and secondary sources.

METHODOLOGICAL APPROACH

For this research, I conducted a qualitative case study approach of COCOMACIA. Case studies are appropriate for in-depth understanding of real-life phenomena, particularly when such understanding is framed in important contextual conditions that are highly pertinent to the phenomenon of study (Yin, 2009). As mentioned earlier, Colombian Black communities' decentralization processes can be viewed as a collection of highly context-specific experiences. Among the hundreds of Community Councils existing in Colombia, COCOMACIA can be considered a high-impact case (Patton, 2015) for two 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, it is the largest Community Council in Colombia (INCODER, 2013) and, as a result, it is highly visible and is considered an exemplary case for the country.

The collective territory entitled to this organization consists of 722,510 ha located in the tropical rainforests of Middle Atrato River basin (see figure 2), inhabited by 7,094 families, for a total population estimate of around 45,000 (COCOMACIA, 2016).

Organizationally speaking, COCOMACIA is an association of 124 Local Community Councils, although it holds a single collective title for the entire territory within its boundaries. The Local Community Councils (henceforth LCCs) are distributed across the collective territory in settlements established in the margins of the Atrato river and some of its tributaries (COCOMACIA, 2016), each with a clearly defined territorial jurisdiction. COCOMACIA's riverine communities predominantly rely on fishing, gold

mining, timber extraction, and agriculture, mostly subsistence with only a few cash crops, for their livelihoods (COCOMACIA, 2016).



Figure 2. Location of COCOMACIA's collective territory in the Colombian Pacific Region.

Source: COCOMACIA 2010 in Perea (2012).

Data collection

Data was collected from June through August of 2017 via in-depth interviews and participant observation. I conducted the data collection with a research assistant who accompanied me during my entire time in the field. Because of limited time available for

data collection in such a large and heterogeneous territory, as well as the importance of immersing oneself in the local context for conducting a qualitative study (Bogdan & Knopp Biklen, 2007; Patton, 2015), data collection strategically took place in two different locations, which correspond to two different jurisdictional levels within the complex organizational structure of COCOMACIA. In Quibdó I interviewed elected leaders who are part of the General Board of Directors of COCOMACIA, which makes decisions at the level of the entire collective territory. It is important to remember that Quibdó is beyond the boundaries of COCOMACIA's collective territory, which means that the General Board of Directors operates from outside of the territory it governs. My research assistant and I spent several days in Quibdó interviewing the leaders at this level, attending some of their meetings, and observing how the leaders make decisions on behalf of the entire collective territory.

At the local level, my research assistant and I collected data in Tanguí, a village within COCOMACIA located in the banks of the Atrato (see figure 3). Tanguí is organized as one the LCCs within COCOMACIA, which means it corresponds to the lowest jurisdictional level within the collective territory. Tanguí was the study location selected for us by the General Board of Directors because of its convenient location for transportation costs and the active involvement of this LCC in the organizational process of COCOMACIA. Most interviews and participant observations took place in Tanguí, so my research assistant and I were able to spend larger periods of time physically and socially immersed in the community.

Tanguí has an estimated area of 5,076 ha and is inhabited by an estimated 229 families, of which about 37% (84 families) live part-time in Quibdó (UNHCR, 2015). The territory under the jurisdiction of this LCC comprises community settlements located in the banks of the Atrato river as well as further inside the rainforest, along the Atrato's tributaries (see figure 2). The main settlement within this jurisdiction is located 2 hours downstream by boat from Quibdó. The main livelihoods in Tanguí are agriculture (mainly plantain and rice plantations), fishing, timber extraction, and gold mining. Among these activities, fishing is the only activity practiced by all resource users at some point, as it provides the main source of protein for the households.

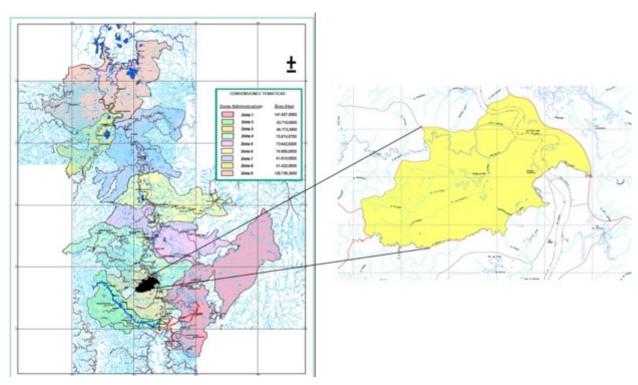


Figure 3. Location of the Local Community Council of Tanguí within COCOMACIA's collective territory.

Source: COCOMACIA, 2016.

In-depth interviews

For the study, we conducted a total of 20 in-depth interviews with three different types of actors: elected representatives, other local leaders, and resource users (see table 2). The interviews were semi-structured in nature, with specific themes and topics emphasized depending on the person interviewed (for instance, fishers were asked more detailed questions about their harvesting activities, while community leaders and representatives where asked about the protocols and procedures within the organization). The interviews lasted one to two and a half hours and were audio-recorded with prior oral consent from the interviewee.

Table 2. Interviewees by type of actor and jurisdictional level.

	JURISDICTIONAL LEVEL	ELECTED REPRESENTATIVES	OTHER LEADERS	RESOURCE USERS
	COCOMACIA	3	1	-
	LCC (Tanguí)	4	1	11
_	TOTAL	7	2	11

All the interviewees were purposefully selected. The first interviewees were selected following a snowball or chain sampling strategy (Patton, 2015). When I first arrived in the field and during my first week in Tanguí, I was personally introduced to my interviewees right before the interview started by a member of COCOMACIA's board of directors. Importantly, in the context of my case study, unfortunate past experiences with outsiders or *paisas* have led to a generalized mistrust in newcomers. In fact, people in the territory usually do not answer questions from outsiders, unless they know them from before or the newcomers are formally presented or introduced to the community by a well-known local leader within COCOMACIA. After the first week living in the community, engaging in informal conversations and activities with the people, and being

observed conducting interviews with the approval of reputable local leaders, I earned trust from the locals and switched to a reputational sampling strategy (Patton, 2015). Following this second sampling strategy, I interviewed resource users and leaders among the community.

Participant observations

In addition, I conducted four participant observation exercises on fishing trips, all of which were audio recorded with prior oral consent from the community members involved in the activity. I also attended three community meetings and one workshop in strategic planning with COCOMACIA leaders and with officers from the World Wildlife Fund – Colombia, an NGO that has been working in partnership with COCOMACIA for more than a decade. I gathered data from field notes taken at these meetings, as well as during daily unstructured observations and informal conversations.

Primary and secondary sources

Parallel to interviews and observations, I collected primary and secondary sources while in the field. These data sources consisted of official and unofficial documents of COCOMACIA regarding the process of creating the community council, the organizational structure of the council, and the bylaws existing within the collective territory (see table 3).

Table 3. List of primary and secondary sources collected during the fieldwork.

Document name (Original name in Spanish – English Translation)	Year of publication
Plan de Ordenamiento Territorial y Ambiental (POTA) del Consejo	2016
Comunitario Mayor de la Asociación Campesina Integral del Atrato /	
COCOMACIA 2016-2027	
Environmental Master Plan of COCOMACIA 2016-2027	
Medio Atrato: territorio de vida	2002
Medio Atrato: territory of life	_
Reglamento Interno del Consejo Comunitario Local de Tanguí	2015
Internal bylaw of the Local Community Council of Tanguí	_
Reglamento Interno General de COCOMACIA	2009
Internal bylaw of COCOMACIA	
Plan Estratégico COCOMACIA: aportando a la construcción de paz 2017-	2017
2027	
Strategic Plan of COCOMACIA: contributing to peace construction 2017-	
2027	

Considerations around data collection

Among the 124 LCCs that COCOMACIA comprises, Tanguí was the one selected by the General Board of Directors for the study. Therefore, the findings in this study are framed in a specific social and biophysical context within COCOMACIA. It is worth mentioning that Tanguí was chosen for the study by the local leaders because of two main reasons. First, its convenient location, only two hours away from Quibdó, where data collection was also taking place. Second, its active involvement in the organizational process of COCOMACIA, its leadership, and, overall, for it being an *exemplary* LCC within the organization. In that sense, the findings of this research reveal what the situation is like in one of the LCCs that, according to the local leaders, is doing better off. This, in turn, would suggest that other LCCs might be having a harder time in terms of their performance for resource governance. In qualitative terms, Tanguí provides a case within COCOMACIA that can be interpreted contextually, and, to that

extent, it speaks on behalf of the entire Community Council by providing an image of upper range of the performance spectrum.

Similarly, it is important to note that I was introduced to the people in the local community and in the Board of Directors by people affiliated with WWF Colombia. WWF Colombia is a Non-governmental Organization (NGO) that has worked in partnership with leaders of COCOMACIA for the development of planning documents and tools. Furthermore, WWF has a reputation as an organization that promotes biodiversity conservation and empowerment for local communities in resource management. In that sense, I acknowledge that my connection with WWF Colombia might have affected the responses from the people during the interviews and participant observations. This potential bias was minimized by my personal attendance and participation in informal meetings and activities where I could be seen beyond my affiliation with this organization. Moreover, I explicitly indicated that I was not working for this NGO in all the different interactions I had with locals.

Data condensation and analysis

I analyzed the data iteratively throughout the stages of data collection, data condensation, data display, and drawing conclusions (Miles, Huberman, & Saldaña, 2014). The raw data consisted of verbatim transcripts of the interviews and participant observations and expanded field notes. All the transcripts and expanded notes were in Spanish, which is the language in which I collected the data. I translated the excerpts quoted in the manuscript to English.

The development of the coding scheme for organizing the raw data included three stages. First, and prior to the fieldwork, I developed an initial literature-based coding framework for the thesis proposal. After the fieldwork, I modified the initial coding scheme with the purpose of better organizing the data collected. An overview of the data collected and the experience in the field suggested considering emergent themes overlooked in the initial literature-based coding book. In turn, I developed a second coding scheme. A peer Colombian graduate student and I individually coded the transcript of one of the interviews conducted in the field to test the second version of the coding scheme. After discussing the results of this coding exercise, I created a third and final version of the coding book, with a smaller number of codes and more detailed definitions and rules for each of the codes to clarify the process. The final coding scheme included tags, definitions, rules, and examples for each code (see Appendix 1). Importantly, each stage of modifying the coding scheme implied an adjustment of the research questions and the conceptual framework of the thesis, in accordance to the interactive approach (Maxwell, 2012) followed for the research design of this qualitative study.

After I coded the raw data, I summarized each of the codes and compiled them into displays for the final analysis. Finally, triangulation (Pretty, 1995) was used to confirm the results by comparing the information gathered using different data collection instruments and the information obtained from the additional primary and secondary sources retrieved.

RESULTS

How did COCOMACIA respond to the collective titling in terms of its organization and institutional structure?

According to the Law, Black communities interested in applying for a collective title are expected to fulfill two main requirements for the management of natural resources in their territories. First, they must organize into Community Councils, a specific organization structure described in Decree 1745/1995. Second, Community Councils must create an Internal Bylaw according to which natural resource management will be conducted in the collective territories. This section describes how COCOMACIA responded to these requirements posed by the law.

Governance of the territories prior the collective title

Prior to acquiring their title, the communities currently belonging to COCOMACIA exercised *de facto* rights over the territories they inhabited. Organizationally, the exercise of the *de facto* rights of management of the territories lacked a formal corresponding structure for decision-making. In other words, the governance of resources took place in a more-spontaneous, less-structured way.

The only instances for decision-making around this topic that existed prior the title were the local committees created by ACIA -described earlier in the document- and the Communal Action Boards.

In Colombia, since the late 1950s, the government formally recognizes community action when it is organized under the figure of Communal Action Boards

(*Juntas de Acción Comunal*). Communal Action Boards were authorized by the State (Law 19/1958) and they represent a key precedent for the origins of legitimate expressions of community organization in the Colombian Pacific (Restrepo, 2013). These boards became the formal point for exchange between local communities and municipal offices, and, as such, they were the administrative means for official funding to local communities. Each of the local communities grouped under COCOMACIA had a Communal Action Board before the ACIA process started. However, these formally disappeared once COCOMACIA emerged, as the Community Council became the legitimate administrative body. Nowadays, only a few local communities within COCOMACIA still have a Communal Action Board, reflecting the hope that having this channel open may improve the chances of being allocated municipal funding for local development.

For enforcement purposes, until the mid-2000s, some of the local communities of COCOMACIA had a Police Inspector appointed by the National Police to control and be the disciplinary authority inside the community. Tanguí was one of those communities. The Police Inspector was generally someone from the community who applied for the job. The Inspector's main duty was to enforce the regulations of the police code for peaceful coexistence within the village. Police inspectors could send to jail people who did not obey sanctions or ask for support from police officers in nearby towns or cities when needed. This vested in them particularly strong authority, acknowledged by the people in Tanguí:

If any person there committed an offense, the Inspector would tell the person "hey, sir, you're going to have to slash during three days in the back of the

village." [...] if you don't do such thing, I will send you to jail for an entire day. And if you don't obey me, I'm gonna send a report to Quibdó." [...] the Police would head there to bring you back. Back before, the people were afraid of the Police and the authority, because one was not used to seeing any of that.

(Interview leader, August 2017)

Whether Police inspectors enforced regulations related to natural resources and the environment is unclear. Some interviewees suggested they did, but a local leader, who was appointed Police Inspector in the past, clearly stated that enforcing those regulations was beyond his job. According to this interviewee, municipal and regional environmental offices were the ones in charge of enforcing natural resource and environmental regulations.

The figure of Police Inspector no longer exists in Tanguí, but it continues to exist in other local communities. To some, the lack of a Police Inspector in Tanguí is a result of the armed conflict because, as the visible heads of police forces in local communities, many Police Inspectors were victims of threats and homicides. Others believe it was one of the results of the governance change after Law 70/1993 was promulgated and Community Councils became the local authorities in their communities. While the law indicates that there should still be Police Inspectors in certain villages in the area, only a few of the villages eligible to have a Police Inspector actually do. Local leaders are aware of this inconsistency and are looking for legal mechanisms to demand the presence of Police Inspectors in all eligible villages. Meanwhile, LCCs in COCOMACIA rely on contacting Police Inspectors located in neighbor communities or cities in cases where inappropriate behavior threatens peaceful coexistence.

First requirement of the law: bodies for decision-making and enforcement in COCOMACIA

Since the times of ACIA, one of the main challenges has been engaging and representing the many scattered communities that have been affiliated with the organization. As mentioned earlier, a single Community Council was created to apply for title so as many communities as possible could be titled as quickly as possible, without fracturing ACIA's organizational process. ACIA had chosen an organizational structure led by a board of directors that, in collaboration with representatives from local communities, made the major decisions in assembly. The local representatives brought input from the discussions taking place in each one of their committees. This hierarchical structure was intended to organize decision-making and allocate responsibilities, while still having representative grassroots' input to the process.

Later, when the right to collective property was granted to Black communities via Decree 1745 of 1995, the body of law -which was developed with major input from ACIA- kept the same spirit of representation. According to this decree, Black communities applying for collective title are expected to get together and create a Community Council, an entity integrated by the General Assembly, an elected Board of Directors, and a Legal Representative elected to act on behalf of the Community Council in judicial instances (Art. 3-12, Decree 1745/1995). At this point, it must be said that each Community Council in Colombia has gone through a unique formation process and is immersed in a particular biophysical setting. Thus, important characteristics such as territory size and population size vary dramatically across the

titled community groups (Offen, 2003). In turn, the different Community Councils that have been titled so far have very diverse organizational structures.

In the case of COCOMACIA, a simple structure such as the one suggested by law was not sufficient for achieving adequate representation and communication. Given the vast territory granted under the title and the numerous, scattered communities covered by it, COCOMACIA conformed to the structure proposed by law but elaborated upon the hierarchical structure inherited from ACIA. Thus, the complex structure of COCOMACIA is composed of administrative bodies operating at different spatial scales and involved in different decision making processes (COCOMACIA, 2016).

Three jurisdictional levels exist within COCOMACIA: the global territory, administrative zones, and the LCCs (see figure 4). The global territory refers to the entire portion of land titled to COCOMACIA. COCOMACIA's global territory is divided into nine administrative zones. Once the global title was granted, these administrative zones were delineated based on hydrological and geomorphological features of the land (e.g. rivers, streams, drainage divides) (COCOMACIA, 2016). The administrative zones were created as an intermediate body between local communities and the bodies for decision-making at the global level. Finally, each administrative zone is divided into LCCs. LCCs are composed of residents of local communities. Spatially, they represent the area of influence of a village or multiple neighbor villages that have historically and traditionally interacted and are socially considered a single group, despite their sometimes discontinuous occupancy of the territory. In total, COCOMACIA's territory

encompasses 124 LCCs (COCOMACIA, 2016). Importantly, not all the administrative zones or LCCs have the same amount of land or population size.

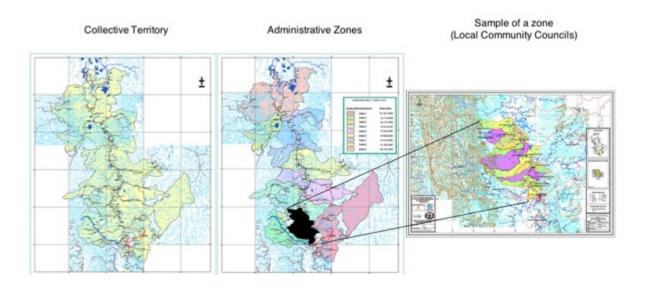


Figure 4. Visual representation of the multi-level governance structure of COCOMACIA operating at different spatial scales.

Sources of the maps: COCOMACIA, 2012.

COCOMACIA has different decision-making bodies operating at each of these jurisdictional levels (see figure 5 and appendix 2). Four bodies are responsible for governing at the global level of COCOMACIA: General Assembly, Disciplinary Committee, General Board of Directors, and the General Legal Representative (COCOMACIA, 2009). The Disciplinary Committee, the General Board of Directors, and the General Legal Representative all operate permanently in Quibdó. Meanwhile, the General Assembly ordinarily meets only meets every three years or calls for special meetings when needed (COCOMACIA, 2009). It must be said, however, that financial limitations within COCOMACIA have constrained participation and representation in the General Assembly meetings. A sustained decrease in the funding available to the

Community Council has led to both a reduced number of representatives from local communities summoned for the meetings and a reduced frequency of ordinary meetings.

The Zonal Committees operate at the second jurisdictional level, the administrative zones. These committees were created after local communities started holding fora with the aim of collecting inputs and feedback from LCCs for bodies at the global level. The fora also helped to coordinate the execution of policies and actions mandated by the General Board in the LCCs. Moreover, the zonal fora became important spaces for identifying opportunities for funding for the local communities through the General Board, or externally, by making applications and creating grant proposals for external funding.

Finally, at the most local level, the operating bodies are the LCCs. LCCs are internally organized in a structure similar to that of COCOMACIA at the global level; they are composed of a Local General Assembly and a Local Board of Directors with elected officers. The Local General Assembly meets every year to discuss and evaluate the activities taking place within the LCCs (COCOMACIA, 2009; Consejo Comunitario Local de Tanguí, 2015). However, the interaction and communication between LCCs and the broader bodies of COCOMACIA fall entirely within the duties of the Local Board of Directors. The Local Board of Directors works directly from the local communities. Nevertheless, sometimes Local Legal Representatives end up moving to Quibdó, where they have easier access for interacting with officers of other as well as with potential

funding sources. This is particularly true when there are development projects in place in the LCCs.

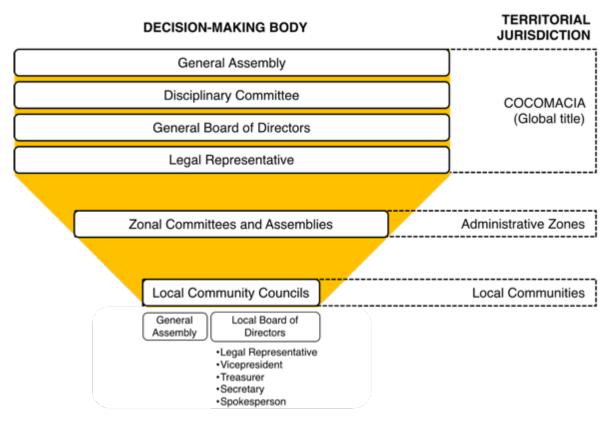


Figure 5. Organizational structure of COCOMACIA by decision making body and its territorial jurisdiction.

Second requirement of the law: COCOMACIA's Internal bylaw

According to Decree 1745/1995, the lands collectively titled to Community Councils are to be managed based on an Internal Bylaw, a body of law to be designed within the Community Councils and approved by the General Assembly (art 32. Cap 5). Internal Bylaws have been enacted within the organization at two different jurisdictional levels. A General Internal Bylaw operates at the global level, and Internal Bylaws have been in each of the LCCs.

Formalizing the customary

It is our parents' custom to take us to work with them on the days we don't have class. We go to the fields to plant rice, to plant plantains, we go fishing, we go do this and we go do that, and therefore, little by little, one learns. Without being told "look, this is how things are done", by watching, one learns.

(Interview Local leader, July 2017)

Customary rules and norms have been the institutional foundation by which the local peoples of COCOMACIA interact with their surroundings. Learning by example from their parents is the way individuals have engaged with their landscape and the resources this landscape provides. Years ago, before COCOMACIA and even ACIA were constituted, these inherited behaviors provided the rules and norms that oriented resource withdrawal and management in these territories. These institutional arrangements fell under the category of informal institutions, socially enforced and transmitted via tradition and custom.

When ACIA was first granted management rights over the land, after the Buchadó Agreement was signed in the late 1980s (see Context), local communities and leaders faced for the first time the task of designing formal rules and norms for managing natural resources in their lands. The Buchadó Agreement required the construction of a management plan for the lands under the co-management scheme. Under this agreement, although ACIA was playing an active role, government offices and agencies also participated as stakeholders for forest management. In other words, ACIA was only a part of a larger group of decision-makers. Thus, this first experience of local communities in designing rules was influenced by multiple actors beyond the local communities. A local leader mentioned who these actors were:

[...] given that we were working altogether with the Corporation, the management agreements were built by a bureau composed by our independent advisors, technicians appointed by the Corporation, delegates representing the organization, and professionals or technicians knowledgeable on the issue appointed by the Diocese.

(Interview Local leader, July 2017)

The management plan that resulted from this collective effort gave birth to the first set of rules and norms, formal in nature, for fishing, mining, forest exploitation, and hunting.

During the 1990s, when ACIA became COCOMACIA, these local communities faced a new rule-design process: the creation of the Internal Bylaw. The Bylaw was developed under the guidance of local leaders who were influential during the times of ACIA. The process was also supported by officers appointed by the government as part of the PMNR Regional Committees (see Context). Then the document was presented to the General Assembly, where it was discussed and finally approved.

Although the single original document described above already fulfilled the requirement posed by law, COCOMACIA's institutional landscape has expanded beyond it to represent the interests of local communities. Along with the subdivision of COCOMACIA into LCCs, the original General Internal Bylaw gave rise to a system of Internal Bylaws. As part of this process, the nature and function of the General Internal Bylaw and the Local Internal Bylaws also changed. Currently, the General Internal Bylaw in force delineates the ethical principles along with the mission of the organization, and also establishes the bodies operating at the global and zonal level and the positions required on each of them. Meanwhile, the considerations for natural resource management are now found in a set of planning documents that have been

developed by COCOMACIA over the past two decades⁸. In Colombia, planning documents are what conventionally government-based offices and agencies use for orienting natural resource management in their areas of jurisdiction. These plans contain more technical language and are supported by the most detailed environmental information available.

Importantly, however, the planning documents do not provide prescriptions for resource governance, unlike bylaws. Consequently, the General Internal Bylaw and the planning documents only serve as a general guide for LCCs to develop the enforceable prescriptions for resource governance appropriate for their local territories. The creation of Internal Bylaws at the very local level can be seen as a process in which the institutional design within COCOMACIA was decentralized. This is how a local leader explained the reasons that underlie to the choice of undertaking such strategy:

We are trying, like parents do when they have children, to find the mechanisms to grant them with autonomy, for each child to live on its own. The fact is that the major process, the big one, remains standing and alive, with its statutes, and its General Internal Bylaw. But every LCC now also has its Board of Directors, statutes, and its own Internal Bylaw. Otherwise, solving the problems in each local community gets out of hand.

(Interview Local Leader, July 2017)

As suggested by the previous quote, Local Internal Bylaws are meant specifically address the issues in each local community. They respond to the particular biophysical and livelihood characteristics of the LCCs that enacted them through prescriptions for resource management and specific sanctions that individuals incur in case of noncompliance. These documents are developed at the LCCs under the guidance of

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⁸ The development of these documents has been supported by external NGOs.

and with approval from the respective Local General Assembly. Once approved at the local level, COCOMACIA's General Board of Directors reviews and endorses the local bylaws to insure they follow the general bylaw

Creating a Local Internal Bylaw in Tanguí

An overview of the process followed by Tanguí better illustrates how local communities undertook the challenge of designing rules. Tanguí LCC has had the distinction of being a local community with a number of individuals who have reached professional levels of education and have occupied important positions in influential and respected entities, such as municipal or departmental governments or the church. These leaders have sometimes officiated in the Local Board of Directors and even in higher levels of COCOMACIA. Even when they have not been appointed as officers within the organization, they have generally served as informal leaders, playing fundamental roles in determining the institutional context for the local community and COCOMACIA.

In the case of Tanguí's Internal Bylaw, this group of local leaders -especially the ones trained in Law- were the ones who took the lead and proposed most of the prescriptions found in the body of text. This process was described by a local leader:

In order to elaborate the Internal Bylaw, the entire community gets together, but since there are some lawyers and professionals that are more knowledgeable, they are the ones who raise the concerns and provide their ideas to the plenary session, and then the people approve, so it is not just them, but the community itself. They can say "this is done this way, or that way, or this cannot be done". But it is the community who says "yes, sounds good, let's do it that way".

(Interview local leader, July 2017)

Tanguí's Internal Bylaw became a model for multiple neighboring LCCs. In fact, current and previous elected leaders of other LCCs openly describe how they took Tanguí's Internal Bylaw as an example and copied almost everything in it, with only minor adaptations based on their local livelihood contexts. Not all LCCs developed their Internal Bylaws with the same criteria for participation from the local communities, nor undertook the same process for creating their bylaws. This would suggest certain homogeneity between formal institutional landscapes among LCCs, but different levels of engagement between the people and their local bylaw.

What is the current institutional landscape for governing inland fisheries?

In COCOMACIA, fishing is combined with other livelihoods such as hunting, agriculture, gathering, logging, and gold panning by people to meet their everyday needs

(COCOMACIA, 2002; Oslender, 2016; Wade, 1997). Fishing, however, is a special livelihood because it is an activity that everyone practices sometime during their lifetime. Fishing is the main source of protein and subsistence for people in the riverine communities. In this section, fishing is explored at the local scale of Tanguí, where this is the main livelihood. There are two reasons for describing fishing activities at this level. First, it is at the level of the LCCs that communities create their own enforceable regulations for resource extraction. Second, at this level is where the processes of resource extraction and/or withdrawal actually take place.

Understanding the fish resource system

The Atrato river is the main axis of a hydrographic complex that consists of a dense network of tributaries and swamps, both of which feed the main channel of the river on its way to the Caribbean. The mid-Atrato basin, where Tanguí is located, is known for being particularly rich in swamps. Swamps, therefore, are key ecosystems under the custody of the LCCs in the area. Importantly, the tributaries and swamps not only feed the Atrato's water flow; they also act as a buffer when the water level of the main channel goes up in response to precipitation. The hydrological and biological dynamics of the Atrato river complex determine the fisheries in the riverine context. Fishing takes place within a complex system, where physical and ecological connectivity play a crucial role in the sustainability of the fish resource.

According to the literature, Western Colombia, including the Pacific region, experiences a bimodal annual cycle of precipitation with distinct rainy seasons (April—May and October—November) and what are referred to as dry (i.e. less rainy) seasons (December—February and June—August) (Poveda et al., 2005). Locals refer to the January through March period as "Summer". However, the transitions between rainy and dry seasons are not the only time when the water level in the Atrato complex undergoes visible changes. According to the testimonials and observations gathered in the field, the water level can vary substantially even within days. According to the residents, this holds true regardless of the time of the year. This particular dynamic is key for fishing, as it affects whether fishers will choose to set up their nets in the

swamps or in a river channel, as described by this leader, who formerly was a fisherman:

[...] when the river level goes up, the fish in the Atrato river go to the swamp and when the water level goes down, the fish remain there, get stuck there, that's why one goes there to catch them. When the level goes up, the fish spread all over the place once more, and when it goes down, they get stuck again.

(Interview leader (former fisherman), July 2017)

According to the fishers, not only the water level influences the location and movement of the fish within the river complex. Fish also move between different swamps.

According to fishers, not all swamps have the same type of water. Swamps are classified by fishers as "clear-water swamps" or "dirty-water swamps", the latter being the ones with higher levels of sediments and, therefore, higher turbidity in their waters. Fish regularly move from dirty water swamps, where they feed, to clear-water swamps, where they can eliminate dirt that has accumulated in their gills. This pattern of movement across the hydrological complex also affects fishers' choices in terms of the location of the nets. Fishers attempt to set their nets in spots where fish are caught in the midst of their movements between swamps, as described by this fisherman:

For instance, "La Honda" [a swamp], there are a lot of fish there, but as it is clear water, it is the fish that stays in dirty water that goes there, to the clear water, to wash themselves, to clean up. But here in "La Quebrada" [another swamp] the water is dirty, then they get a lot of mud in their gills. [...] So, the man [...] sets the gillnet so that when the fish is leaving, the man catches it.

(Interview fisherman, July 2017)

A third process strongly affects fish availability and mobility in the Atrato river - the upstream migration season. Although it is mostly referred to as the upstream migration of *bocachico (Prochilodus magdalenae)*, the fish species with the highest economic

value in the basin, this pattern and season of migration is followed by most of the other local fish species. The upstream migration has large stocks of fish moving from the ocean upstream to replenish the rivers and swamps in the lower-, mid-, and upper-Atrato basin. This season is highly important for the economy of the riverine communities. During the upstream migration, which takes place between December and March, the communities of the Atrato basin, including Tanguí, turn to fishing as the main economic activity. Once the domestic needs for food are covered, the surplus of fish is transported and sold in Quibdó and other cities (COCOMACIA, 2002; Perea, 2012) or even inside the local communities themselves.

Fisheries in Tanguí

Fishing is the main subsistence-oriented livelihood in Tanguí, but it also represents a source of income for many households. This activity is mainly conducted by men. When women do fish, it is mostly for supplying food to their households. Fishers in Tanguí fish with gillnets, cast nets, hand nets, fish lines, fishing poles, and two other methods they locally refer to as trenches and corrals. Trenches consist of strategic water entrances opened manually or adapted by fishers in the edges of tributaries or swamps. Trenches are active fishing spots when the level of the water in the river is high enough for the forest to be flooded. Fish accumulate in these areas because they operate as dead ends for the water body. Trenches attract fish with the dense surrounding forest vegetation which provides food (fruits and seeds) and shelter (roots) for fish. Fishers build wooden walls to enclose their trenches, so that the fish remain

trapped when the water level drops. Fishers claim private ownership over the trenches they build because it takes fishing experience and knowledge to identify good spots for building trenches, as well as physical work for clearing, cutting or adapting tree branches and roots for the trenches.

A corral consists of a narrow wooden infrastructure set up in the rivers' and tributaries' banks, where fish are confined and later collected with a hand net. Corrals are constructed with wood planks assembled in a quadrangular fashion with bait, usually cobs of maize, attached to wooden rods located in the middle of the corral. A corral is built with a sliding door on one side that is tied with a string to the rod that holds up the bait. When fish enter the corral and shake the rod while feeding on the bait, the string is pulled and the door is shut, capturing the fish inside the corral. Like trenches, corrals are claimed as private property by the fishers who build them.

Fishing practices have gone through important changes in the last decades in these territories. According to the interviewees, the *elders*, as they refer to their parents and ancestors from whom they learned how to fish, relied on cast nets, corrals, trenches, and occasionally fish lines and poles for fishing. Nowadays, gillnets are the most popular fishing gear among fishers in the entire Atrato basin. Gillnets are set up by fishers in fixed spots in the rivers, tributaries or swamps on a first-come, first-served basis, but fishers have the freedom to change the locations of their gillnets whenever and as often as they want. Usually, gillnets are set in the late afternoon and then checked by the fishers the morning after. During the upstream migration, given the abundance of fish, gillnets are not set up in a fixed spot in the river; instead, they are

used as a tool for sweeping in the Atrato river and/or its tributaries. Gillnets vary in mesh size, from 2" to 4".

Preferences for fishing gear are not the only things that have changed throughout the years. Another big change in the fishing process in the last 20 years has been the introduction of ice as a means of preserving the fish. The introduction of ice has increased the size of the catch and expanded fishers' range of movement within the basin when looking for fishing spots. Ice allows fishers to spend time in more remote areas, where they stay until they have a catch large enough to bring to the market in Quibdó.

In Tanguí, as in the entire Atrato basin, the vast majority of fishers have Black ethnicity. However, as mentioned earlier, the territory is also inhabited by a few Indigenous families. Interestingly, the coexistence of Embera Indigenous families with the families of the Black communities within the limits of Tanguí has highlighted an important cultural difference for fishing between these ethnicities. Unlike Black fishers, the Embera fishers use diving masks and harpoons: they plunge into the water in areas where they know fish usually live (such as the dense roots of the trees) and from underwater they harpoon their target. The Indigenous fishers use this technique only in the upper portion of the tributaries or in clear-water swamps. Black fishers consider this to be a detrimental technique for fisheries, as they claim harpoon fishing rapidly drives away fish from these areas. According to them, this clearly alters how fish are replenished along the hydrological complex, a process on which fisheries strongly rely. A local fisherman described this conflict between Indigenous and Black fishers' fishing

techniques in his own words as follows:

The Indigenous use their diving masks there [in the roots of the trees] [...] But that drives away fish a lot, because they [the fish] can see it. [...] You know that, for instance, a lot of fish goes up the Tanguí river [a tributary], right? To the headwater... but there they fish with mask and harpoon, so fish leave very fast, fast, fast it leaves.

(Interview fisherman, July 2017)

Fish markets

In the lowlands of the Atrato basin, the surplus from fishing is transported and sold in the markets available in nearby towns (Leal León, 2013). Fishers in Tanguí who make a living from fishing sell their catch in Quibdó, the closest and largest urban center in the mid-Atrato basin. Quibdó is located upstream in the Atrato river from Tanguí, two hours away by motorboat. Given the high costs of transportation, outside the upstream migration season, fishers usually have to send their catch for sale with the motorboat drivers who provide transportation services between Tanguí and Quibdó every day. During the upstream migration season, fishers drive their own boats to Quibdó, as the larger size of the catch enables them to cover the transportation costs and still make profit.

An important characteristic of the Quibdó fish market is that it is never saturated, at least in the fishers' perceptions. Not only is the catch always sold, but almost any species brought by fishers to the market will likely be bought by local traders.

Throughout the year, fishers fish as much as they can, focusing on catching the species that receive higher prices in the market. During the upstream migration season, although the supply of fish increases substantially, the market in Quibdó

grows as well, as buyers from other cities arrive to get part of the catch coming from the riverine communities. This enables the demand for fish in the market to increase along with the increasing supply. The following excerpt illustrates how much the market grows in times of fish abundance.

[...] the guy would stay there until the dawn and would catch forty, thirty arrobas [2000, 1500 fish, respectively]. All were sold. Sometimes the catch is not enough, because there are many motorboat drivers buying; there are places where people would arrive with five, six, seven motorboats. And the guy has to put some fish on all those boats, so it is not enough!

(Interview fisher, July 2017)

During the upstream migration season, some buyers have recently started going directly to the riverine communities to buy fish there as soon as it is caught. This has enabled some fishers to devote all of their time to fishing, since they do not have to spend any time transporting fish to the markets. Also, this allows people who do not own a motorboat or even elaborate fishing gear to participate in fishing during this season. During the upstream migration, pressure on the fish resource is clearly intensified both in terms of an increase in the demand for fish and in terms of more people devoted to fishing.

Current state of fish resources in Tanguí

There is consensus between fishers and local leaders that the fish stocks in Tanguí are declining. The interviewees described a decrease in available fish when compared to the past in terms of three main criteria: diversity, quantity, and fish size. For the first criteria, all fishers interviewed mentioned the disappearance of *boquiancha*

(*Cynopotamus atratoensis*), a fish species that used to be very common in the basin:

The boquiancha disappeared. Catching a boquiancha these days is like winning the lottery. And it was so abundant [...] if one went and set a gillnet, one would have caught some, even during rough times, 10, 15 in just a portion of the net, or even an arroba [50 fish] of boquiancha [...] it was so abundant that in times of bocachico, it had no value, no commercial value it had.

(Interview fisherman, August 2017)

In terms of quantity, fishers acknowledge that although there is a relative abundance during the upstream migration season, the catch overall has decreased. One of the fisherman interviewed described this by comparing his catch during the last upstream migration with what previous generations used to catch:

When the fish came up in February, another fisherman and I went sweeping and brought like 30 arrobas [1,500 fish] of fish. [...] But down there, my dad once set up a trench, a long time ago [...] he said, I remember, he counted 914 arrobas of fish [45,700 fish] in the trench... it was such an amount of fish, that they had to open it and release the fish into the swamp.

(Interview fisherman, August 2017)

Finally, in terms of fish size, the majority of fishers expressed concern with the size they encountered during the last upstream migration season (January-March 2017). In the following excerpt, a fisherman describes this situation and how the reduced size also leads to a change in the mesh size of gillnets:

Two years ago, people would catch an arroba [50 fish] of large bocachico, but not that little one, no. Of large bocachico people would catch their arroba, or even one and a half, but now there is no way you can find large bocachico. 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. [...] I don't know the newborns, I don't know how they're going to sustain themselves.

(Interview fisherman, July 2017)

Two main causes for decreases in fish stocks were described by the fishers and leaders interviewed: intensification of the pressure on fish and changes in the water as a result of gold mining. Predation from introduced fish species and water contamination from waste were also mentioned as potential causes for fish stock declines, but only occasionally. Interestingly, the explanations for declining stocks vary among interviewees. Local leaders mostly emphasize the uncontrolled pressure exerted on the resource by fishers, while most fishers strongly claim that anthropogenic disturbances of the fish resource system have been the main cause for this decrease.

Intensified pressure on fish resources

Various local leaders share the idea that fish resources are declining because the pressure exerted on these resources by fishers is unplanned, uncontrolled, permanent. In the opinion of the leader quoted below, this is aggravated by the lack of external or government actions/strategies in place in the basin to allow the natural replenishment of fish stocks or to aid this process.

People fish to have their sustenance, to buy stuff, but people don't have a measure of how much to fish, like saying "I'm gonna fish 50 kilograms of fish and I only need to sell 50 kilograms of fish". Instead, people go and fish at random. [...] there is no program, plan, nor project aimed at guaranteeing the presence of fish in the Atrato. For instance, in a swamp, let's go there to reproduce fish, so that there's fish available at all times. So, the irrational, unplanned withdrawal is one of the main drivers of fish loss in the Atrato.

(Interview Local Leader, August 2017)

Below is one fisherman's description of how the number of fishers during the upstream migration season increases. This supports the local leaders' concern about fishing intensification.

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, July 2017)

The following description illustrates that the intensified pressure on the fish resource is a regional problem rather than strictly a local problem in Tanguí:

During the upstream migration season, for instance, from Tanguí to Vigía [a town located approx. 140 km downstream from Tanguí in the Atrato river] one can easily find more than 2,000 gillnets in the river.

(Interview Fisherman, July 2017)

Some fishers agree that fishing practices currently in place are contributing to the decrease in fish stocks. These fishers reflect on how the practice of fishing with gillnets with a very small mesh size triggered fish decline:

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. Now you can find 2.80", and there are even smaller nets than that. [...] the seed of fish is what's being depleted.

(Interview Fisherman, July 2017)

Sedimentation and water contamination

All fishers interviewed mentioned that gold mining in the Atrato river has negatively affected the fish resource system. Particularly, two main byproducts derived from gold mining affect the fish resource: chemical pollution of the water and sedimentation.

Before describing these two problems, it is important to distinguish between two types of gold mining found in the Atrato basin: gold panning -or artisanal mining- and mechanized mining. The first, fold panning or artisanal mining, has been practiced in the rivers of the Pacific region since Colonial times. It operates at a very local spatial scale, with a few people gathered in the banks of the river. Usually, gold panning does not include the use of any chemical inputs, and it employs little mechanization; only in the last two decades has this way of mining started to incorporate motorized pumps to facilitate riverbed soil removal. The second type of mining is mechanized mining. which, according to the interviewees, is a more recent way of mining for gold. With mechanized mining, large amounts of soil are removed from the riverbed, either with backhoes in a fixed location or with dredges that navigate along the river channels. Mechanized gold mining started in the Atrato basin approximately 14 years ago and has rapidly spread throughout the basin. This type of mining is done mostly illegally. According to the interviewees, mechanized mining has caused the negative effects on fisheries.

The chemical contamination that fishers referred to as a driver of fish stock declines results from the use of toxic substances such as mercury as part of the mechanized mining process. Mercury is disposed of in the water, poisoning fish along

the river. Furthermore, the mercury accumulates in fish tissues, generating health issues for people who consume these fish. Mechanized mining also alters the natural patterns and rates of sedimentation of the river by greatly increasing the amount of soil and mineral particles in the water. When backhoes and dredges remove the riverbed materials, the river flow transports these materials throughout the river system. Fishers emphasized how they have witnessed increased sedimentation in swamps.

Specifically, in these ecosystems, an increased sedimentation not only can kill fish by clogging their gills, but also fills up the root caves used by fish as shelter, decreasing available habitat.

When the backhoes were introduced, everything got ruined. The large swamps have dried up, have filled up and been spoiled, so the guy almost doesn't have any where 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, July 2017)

Finally, large amounts of trash flow downstream mostly from Quibdó, but also from other riverine communities. Large quantities of trash floating in the water have affected fish, according to some of the fishers. Garbage both clogs root caves and releases chemicals harmful to fish.

Institutions for fisheries

The institutional landscape for fisheries before the Internal Bylaw was created is fuzzy.

Although fishers and local leaders suggested there were institutions before this, it was

unclear what those institutions were and who was in charge of enforcing them. The following testimonial illustrates this:

Before there were no written norms, but they were applied in a traditional manner, by custom, because since our ancestors we've been inculcated that, the conservation of natural resources, because it is the only sustenance we have.

(Interview Local Leader -former fisherman-, July 2017)

Thus, in this section I refer to the institutions currently *recognized* in Tanguí for fishing, which include Tanguí's Internal Bylaw and other informal institutions mentioned by the interviewees or observed in the field. It is important to remember that little can be done by higher bodies within COCOMACIA to directly enforce fishing regulations. As described earlier, bodies above LCCs do not have specific enforceable regulations for fishing. However, the global Internal Bylaw and the planning documents of COCOMACIA provide the general guidelines for LCCs to create specific enforceable regulations on resource use. The only type of intervention in fisheries implemented by a global-level body in COCOMACIA (the Disciplinary Committee) described during the interviews was reminding LCCs of their role in enforcing net regulations.

Institutions recognized in Tanguí for fishing

In this section I describe the institutions that people in Tanguí mentioned during the interviews or during the participant observations. These are the institutions that people know exist, but not all of these are necessarily followed in practice by everyone.

Internal Bylaw

Figure 6 presents the regulations in Tanguí's Internal Bylaw related to fishing. These are the formal institutions for fishing in the LCC of Tanguí. As mentioned earlier, the Internal Bylaw in Tanguí was developed in the Local General Assembly, with community-wide participation and under the guidance of local leaders knowledgeable about laws and regulations. Although everyone mentioned the Internal Bylaw in their interviews and current members of the Local Board of Directors recalled having distributed copies of this document to all households, it was impossible to access the Bylaw in any of the households as people do not have the document at hand. It is not surprising, then, that a couple of interviewees explicitly said that there were no regulations in Tanguí for fishing, even though they knew there was something called "Internal Bylaw". It was only through the legal representative of the LCC that I finally gained access to the document. This suggests that not all people in the local community are equally knowledgeable about what the bylaw is and what it is intended to do.

- 1. Fishing will be done using the following gear: gillnets, cast nets, hand nets, trenches, fish lines, fishing poles. All gear and nets must be registered at the Local Board of Directors in order to avoid misunderstandings between fishers.
- 2. Fishing will be done in a traditional manner, respecting the bylaw and other existing regulations.
- 3. The following things are forbidden:
- Setting gillnets across the mouth of rivers or streams.
- Sweeping swamps with gillnets.
- Fishing with gillnets with a mesh size of less than 3.5 inches in times of fish upstream or downstream migration
- Fishing with dynamite or poison
- Stealing gillnets or buying gillnets that were previously stolen.
- Sweeping or fishing with hand nets on a trench without permission from its owner.
- 4. Some additional rules:
- If a trench gets clogged and it is impossible to fish in it with hand nets, the trench must be opened and the fish released.
- Whoever finds a gillnet set across a river or stream tributary, must remove it and bring it to the Local Board of Directors in whose territory the net was found.
- 5. The sanctions for whoever fails to comply with the previous include:
- Offenders will receive a call for action up to two times before being imposed a fine or sanction, depending on the case.
- For the third time, the offender will be sanctioned by the Local Board of Directors or by the Local General Assembly with a monetary fine of at least \$100.000 COP (around \$35 USD), and the fishing gear will be confiscated. Depending on the case, and only after a prompt payment of the fine, the fishing gear will be returned.
- Whoever is caught stealing others' fishing gear will have the gear confiscated and receive a fine twice as large as the previous, i.e. \$200.000 COP (\$70 USD). Additional sanctions may be imposed to deter committing the offence again, but in case of recidivism, the Local General Assembly will review the case and make a disposition.
- Whoever is caught stealing fish from others will be sanctioned with a fine of \$100.000 COP (\$35 USD) regardless of the circumstances.
- 6. The Local Board of Directors and the Local General Assembly will be the ones imposing these sanctions.

Tanguí, January of 2015

Figure 6. Internal Bylaw of Tanguí for fishing.

For the local leaders, the Internal Bylaw represents a set of regulations that are assumed to be recognized and viewed as legitimate by all people in the LCC of Tanguí:

When someone in the community steals or sets a gillnet across the stream you guys visited last time, and one sanctions them, they cannot refuse the sanction and say no, because we all said, we all committed to not stealing, not setting gillnets across, and the people have to respect that.

(Interview Local Leader, July 2017)

The fact that these regulations were created and formalized at the LCC level, through a process allowing -but not guaranteeing- public participation of the entire local community is what results in this *assumed* general recognition and legitimacy of the body of law. However, in practice, there is more nuance in how this body of law is perceived, interpreted, adopted, or even known by the local people. For those who recall it, the Internal Bylaw represents only a fraction of the institutions recognized for fishing.

Other institutions recognized

Fishers in Tanguí learned from their parents the art of fishing. Some of the traditions inherited by fishers and described during the interviews fall under what Crawford and Ostrom (1995) call *strategies*. For instance, fishers stated the importance of avoiding fishing during the full moon, particularly in clear-water swamps, because the light enables fish to see the nets and, therefore, escape before being caught. However, as Crawford and Ostrom (1995) indicate, strategies are not prescriptive, so they do not have any associated mechanisms of enforcement attached. For this reason, I will only focus on rules and norms for describing the institutional context.

Importantly, as part of the knowledge transmitted by their parents, fishers also inherited codes of conduct for relating to the fishing system. In other words, fishers inherited the dos and don'ts of fishing from their parents. Unlike the prescriptions contained in the Internal Bylaw, these codes of conduct are expressed by fishers in a moral and ethical language which supports the idea that they constitute social *norms* followed by people in Tanguí. Furthermore, these norms are not written down anywhere, for which they constitute informal prescriptions. These informal moral norms have emerged as a result of a very deep understanding of the fishery by the locals.

As suggested earlier, migration seasons are key for sustaining fish populations in the basin. In response to this, the Internal Bylaw of Tanguí sets restrictions on the mesh size of gillnets during the upstream and downstream migration in order to prevent the catch of immature individuals. However, regulating mesh size represents only an indirect, and to a certain extent arbitrary, mechanism for controlling the size of the fish caught. Instead, fishers recognize that fish should not be caught if they are not mature enough. This idea represents a social norm for them. Unlike the mesh size rule, this norm applies throughout the entire year, is differentiated by species, and is rooted in a more specific understanding of why fish size needs to be regulated when fishing. As the following excerpt illustrates, acceptable sizes of fish to be caught depend on the species.

The thing is that there are some species that are small. If you catch one of those, but like they are small, you have to eat it because they won't grow more than that. The ones you return to the water are the small fish of larger species. You return the little ones so that they can grow up and reproduce themselves.

(Interview Local Leader -former fisherman-, July 2017)

Finally, all fishers interviewed were clear in their beliefs that fishing with diving masks and harpoons in swamps, which is the method used by Indigenous peoples, not only is harmful, but is, in fact, forbidden in the territory of Tanguí. Although this rule can be said to be indirectly present in the Internal Bylaw, given that neither diving masks nor harpoons are included among the fishing gear allowed, this rule is not explicit in the formal prescriptions contained in the bylaw. Nevertheless, fishers' testimonials described enforcement and sanctioning mechanisms for this rule in the territory, which reinforces the idea that it is a recognized institution.

Uncertainty about access in fishing institutional arrangements in Tanguí

The Black communities that belong to COCOMACIA see in their territories something that goes beyond a mere physical space for building a house, cultivating or obtaining the food they require to live. Instead of being grounded in economic values, possession over the land is rooted in family, community, and cultural values and provides every family and all of its members with a place to work (COCOMACIA, 2002). People in these communities are clear about the area of influence of their local community and neighboring communities, which includes knowing what swamps and forests they share with one or more neighboring communities (COCOMACIA, 2002). In fact, forests, mines, swamps, and rivers are considered by the locals as collective property.

However, the *de jure* property rights over these spaces authorized by the Colombian law conflict with people's consideration. On one hand, in Colombia all bodies of surface water are public goods, with very few exceptions, according to Decree

2811/1974. On the other hand, according to the National Constitution (Art. 332), the State owns underground non-renewable natural resources, including gold and other minerals. In other words, although the legal title conceded collective property rights over the land, the river system and the underground (which still are fundamental parts of the territory) fall outside of the rights grants.

In response to this, Tangui's Internal Bylaw does not regulate access to fishing areas in the collective territory. Fishers described how the river, the swamps, and even some tributaries in the Atrato basin constitute shared spaces for different Black communities within COCOMACIA and other communities, like Embera Indigenous groups. According to the interviews and informal conversations, local fishers usually see fishers from neighboring communities entering Tanguí's tributaries and swamps and setting up gillnets in the portion of the Atrato river that falls under the entitled land of Tanguí. However, there is disagreement among fishers on whether outsiders and foreigners, especially people who do not belong to a Black community in the basin, are allowed to fish in the waters of Tanguí without any permission or authorization from the local community. For some, there are no restrictions on who is authorized to fish in Tangui's waters. Others stated that for foreigners to be able to fish in Tangui, they have to be in the company of someone from the community. Nevertheless, previous excerpts suggest that what is actually seen in the practice during the upstream migration season is an open access system for fishing, as fishers described how people from other places travel to the Atrato basin to fish and take advantage of the fish abundance.

What is the capacity for action of COCOMACIA in regard to fisheries' governance?

In this section, I described the capacity of action of COCOMACIA at two levels. First, in terms of what is happening inside the collective territory with the recognized institutions. Second, in terms of the external institutions existing for managing fisheries and the role of other entities part of the regional governance system for this resource.

COCOMACIA's rules-in-use for fishing: monitoring, enforcement, and compliance In Tanguí, people acknowledge that monitoring the natural resources is a task shared by all members of the LCC, although it must be said that this is not a formal duty assigned to the people in the bylaw. Fishers play a decisive role as monitors of fishing activities, as they are the ones who frequent the fishing spots. Therefore, they are a key part of the chain of enforcement of rules for sustaining the resource system. The following fisherman describes his responsibility for monitoring in the following terms:

The guy has to tell the Council, has to tell the Council because that's a harm for one, because the stream, if it's affected, then the fish won't enter and even if it does, it enters surly. And dead already, the guy won't catch the fish...

(Interview Fisherman, July 2017)

Social control between fishers exists because they are the ones who frequently access fishing areas and know how to go about fishing. As a result, they are expected to have a good idea of who is sharing their areas, what those shared areas are, and how others

are fishing in there. Simultaneously, they are being observed by the other fishers with the same lens. A fisherman described his awareness of with whom he shares the fishing spots by recalling a day in which his gillness were stolen:

Sometimes it is people from somewhere else and sometimes it's people from here, neighboring villages. You know who it was... For example, one goes and sets the net in a stream, so you know who goes to that stream. And of the people who go there, if they have bad habits, well, they know how to move around. But one knows directly how things are done, of course!

(Participant observation, July 2017)

I found different types of evidence suggesting there are people fishing in Tanguí who are not in compliance with some of the institutional arrangements recognized in the LCC. Table 4 summarizes the evidence found for each of the institutions *recognized* in the territory.

Table 4. Compliance and enforcement of recognized fishing institutions in Tanguí.

Type of institution	Institution	Status	Compliance	Enforcement
Formal	Fishing will be done using the following gear: gillnets, cast nets, hand nets, trenches, fish lines, fishing poles.		Direct evidence of all these types of fishing gear being used by people in the local territory.	No enforcement, as other gear is used in the territory which is not in the list.
Informal	No fishing with masks and harpoons.		Testimonials indicate infringement by Indigenous.	Testimonials described cases where Indigenous were effectively sanctioned for doing this.
Formal	Gear must be registered at the Local Board of Directors to avoid misunderstandings between fishers.		Direct evidence of infringement. People were seen acquiring or crafting new nets without registering them at the Local Board.	No apparent enforcement.
Formal	Fishing will be done in a traditional manner, respecting the bylaw and other existing regulations.	?	Unclear what traditional means; no consensus among the people on what the bylaw and other existing regulations are.	
Formal	No setting gillnets across the mouths of rivers or streams. Whoever finds a gillnet set across a river or stream tributary must remove it and bring it to the Local Board of Directors in whose territory the net was found.		Direct evidence of infringement. However, people indicate that this is allowed during times of scarcity.	Testimonials described cases where fishers effectively removed misplaced gillnets which were later confiscated by the Local Board. Visual evidence of fishers refraining from removing misplaced gillnets, alleging times of scarcity.
Formal	No sweeping swamps with gillnets.	?	No evidence of this happening in any of the fishing trips.	No testimonials referring to cases of enforcement of this regulation.
Formal	No fishing with gillnets with a mesh size of less than 3.5 inches in times of fish upstream or downstream migration.		Testimonials indicate infringement. People described the use of nets with mesh size below 3.5" during the upstream migration as a common behavior.	Testimonials suggest this rule was not being enforced because of the scarcity of larger fish.
Formal	No dynamite nor poison fishing.		Testimonials indicate infringement. People described the use of poison as a common practice in the area.	No evidence of fishers reporting this situation, nor of the Local Board sanctioning offenders.

Table 4 (cont'd)

Formal	No stealing gillnets or buying gillnets that were previously stolen. Whoever is caught stealing others' fishing gear, will have the gear confiscated and receive a fine twice of \$200.000 COP (\$70 USD). Additional sanctions may be imposed to deter committing the offense again, but in case of recidivism, the Local General Assembly will decide what to do with the offender.		Testimonials indicate infringement. People described having had their own nets stolen and knowing of other victims of theft.	Testimonials indicate that there is no effective response from the Local Board for enforcing these sanctions.
Formal	No sweeping or fishing with hand nets on a trench without permission from its owner.	?	No evidence of this happening in any of the fishing trips. However, one interviewee indicated that he knows of fellow fishers who fish with hand nets in his corrals without permission. This suggests this rule may also be broken.	No testimonials referring to cases of enforcement of this regulation. The fisher describing the corral situation said he did not do anything to catch the attention of the fisher who fished in his corrals without permission, because he is a friend and has helped him in the past.
Formal	If a trench gets clogged and it is impossible to fish in it with hand nets, the trench must be opened and the fish released.	?	No evidence of this happening in any of the fishing trips.	No testimonials referring to cases of enforcement of this regulation.
Formal	No stealing of fish. Whoever is caught stealing fish from others will be sanctioned with a fine of \$100.000 COP (\$35 USD) regardless of the circumstances.	?	No evidence of this happening in any of the fishing trips.	No testimonials referring to cases of enforcement of this regulation.
Informal	No catching of small individuals of large fish species. If caught in the net, the small fish must be released back.		Direct evidence of infringement. However, people indicate that this is allowed during times of scarcity.	No direct evidence or testimonials referring to cases of enforcement of this regulation.
1		KEY	FOR STATUS	
			Institution not in-use	
			Institution "partially" in-use	
		?	Insufficient evidence	

Scarcity was given as a reason for noncompliance or lack of enforcement of some of the recognized institutions in Tanguí. Particularly, compliance with or enforcement of two institutions was evidently affected by scarcity concerns: prohibition of setting gillnets across the mouth of rivers or stream (rule of the Internal Bylaw) and requiring release of small individuals of the larger fish species (social norm).

For some, scarcity has resulted in a re-interpretation of the institutions. According to the Internal Bylaw, gillnets cannot be set across the mouths of rivers or streams under any circumstance. If people do so, anyone is entitled to remove the nets and have them confiscated by the Local Board of Directors. However, according to some interviewees, times of scarcity have led to a modification of this rule in terms of the time of the year where it *should* apply. During a participant observation, this is what a fisherman replied to me when I asked him about a gillnet we passed by that was clearly set across the mouth of a stream:

Because of the moment we're in, we cannot do anything, we're in times of scarcity. The president and its fellows are authorized to remove any gillnet they find like that one, but during the upstream migration season. If people are only rummaging for a bit of food, then they can set it up like that. Honestly, it's okay, you need to let people enjoy, have something to feed their children for lunch.

(Participant observation, July 2017)

The fishers interviewed or with whom I went on fishing trips during the observations not only allow others to break this rule, but they mentioned that they have at times chosen not to comply to this regulation either. In other words, they declined to exert social control for this institution, as they understand the reason and experience the same need first hand. Something similar happens with the social norm according to which fishers

should release small individuals of the larger fish species. Fishers justify their lack of compliance with this regulation by citing scarcity and their strong reliance on fish for subsistence, but they also acknowledge that they are practicing a behavior they do not consider acceptable. A fisherman interviewed described this dilemma in the following terms:

[...] I don't know if you guys have seen these little fish that have been coming up, the tiny ones, that's what the net they use here is for and whoever doesn't own one of those won't catch any fish. [...] I don't like catching little fish, but you gotta do what you gotta do.

(Interview fisherman, July 2017)

It is unclear whether this re-interpretation of the regulation is formally endorsed by the Local Board in Tanguí. However, when interviewed, local leaders also suggested that scarcity makes the situation complicated for enforcing the regulations. Overall, not only fishers but also local leaders, who were also fishers in the past, seem to face a moral dilemma in times of scarcity for enforcing the regulations.

It's because of how difficult it is to find the resource. I was in Tanguí a few days ago, and catching fish has become such a piece of work. So one says, they catch a little fish, but then there's the need to eat the fish, so people has to do it... 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-, July 2017)

Interestingly, one of the interviews suggested that the limited enforcement of the social norm about fish size is not just a result of scarcity but has always been the case. This social norm is assumed to be heavily rooted in people's knowledge of and familiarity with the system, which should be enough for compliance. When I asked the interviewee

if he called attention to a fellow fisher who he knew was catching little fish, he replied:

No, because that was... how can I explain... it is self-will of that person to know that a little fish shouldn't be caught because then that comes with a heavy cost for us.

(Interview local leader -former fisherman-, July 2017)

The only regulation for which I gathered evidence on effective enforcement was the prohibition of Indigenous peoples' fishing with diving masks and harpoons. Some of the fishers described cases in the past in which Indigenous fishers were seen catching fish with masks and harpoons, despite the method being widely recognized as not permitted in Tanguí. These fishers described the sanctions that were applied to the offenders, which included suspension of fishing rights, confiscation of the fishing gear, monetary sanctions, and required community work. It is important to clarify that a few families composed of Embera Indigenous people have been authorized to live in Tanguí, without formally belonging to the LCC or COCOMACIA. To live in the territory, they are required to comply with the Internal Bylaw and the ways of doing things indicated by the LCC. Also, they cannot participate or vote in General Assemblies. This might help to explain why, although diving masks and harpoons are not explicitly forbidden in the Internal Bylaw, this is still a well-recognized proscription among Black fishers and leaders, as they all agree this method for fishing threatens the resource. Interestingly, this informal institution seems to be more rigorously enforced than other formal and informal regulations.

As it has been described so far, there are challenges and obstacles existing for

monitoring and enforcement on the side of fishers. However, the situation is similar regarding other bodies existing at the local level, which are in charge of enforcement. Particularly, there were very few mentions in the interviews of times in which fishers have *actually* informed the Local Board about infringements, which suggests that their monitoring responsibilities are not being fulfilled. Moreover, fishers' testimonials also indicate that the mechanisms of enforcement beyond monitoring are not working well either.

Previously in this section, an excerpt revealed that fishers have the means to identify when their nets have been stolen, and they are likely to know who was responsible for this offense. Once the theft is reported to the Local Board of Directors, it is the duty of this local body to sanction the offenders and enforce the sanctions stipulated. Nevertheless, fishers suggested these mechanisms have limited efficacy. When I asked one of the fisherman if he asked the Local Board for support after his nets were robbed, he replied:

Yes, one tells them, but still, they [the offenders] just fool around and end up not paying you anything. You insist, but [...] at the end I just left the things that way...

(Participant observation, July 2017)

Relatedly, a fisher expressed his particular frustration with the lack of enforcement of fishing regulations in Tanguí. He illustrated his concern by comparing the situation in Tanguí to what happens in other riverine local communities located downstream:

In Puné [a community downstream] they say: nobody can go and sweep the swamps, and nobody goes with their gillnets to sweep the swamps. Here

they say: nobody can go sweep the swamps, and it is like if they had said: go sweep the swamps. That's the issue. So, the law towards the lower parts is stronger than over here. That has been the case a while ago.

(Interview fisherman, July 2017)

Overall, the evidence suggests that enforcement of fishing regulations at the local level (within the boundaries of the LCC) is weak, both by resource users themselves, as well as for organized bodies in charge of playing a role in these regards.

Institutions for fishing outside of COCOMACIA and its enforcement

COCOMACIA is part of a group of stakeholders entitled to participate in fisheries governance. As described earlier, after the legal changes that occurred during the 1990s, Community Councils gained the right to become legal stakeholders in environmental governance decisions taking place within their newly granted territorial jurisdictions. Yet, these newly legalized collective territories did not emerge in an institutional vacuum. Since these areas are still part of the Colombian National territory, they legally fall under the custody and management of government-based offices and agencies, particularly CARs and municipal governments. In other words, there are overlapping jurisdictions in the collective territory of COCOMACIA.

Specifically, COCOMACIA's territory falls within the boundaries of seven municipal jurisdictions, each with a Secretary in charge of environmental issues, and two department jurisdictions, each with separate CARs entitled for environmental management⁹. During the interviews, little was mentioned about the Secretaries of

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⁹ The municipalities are: Atrato, Quibdó, Medio Atrato, Bojayá, and Carmen del Darién, in the department of Chocó, and Vigía del Fuerte, Murindó, and Urrao, in the department of Antioquia.

environmental issues of the municipalities. In fact, the only mentions of municipalities emphasized the low budget under which these jurisdictions operate and the little - sometimes inexistent- support they provide to the LCCs. CARs, on the other hand, were frequently mentioned by local people, and were suggested to play key roles in resource governance. As mentioned earlier, two CARs have overlapping jurisdictions with COCOMACIA. In this document I refer only to the relationship between COCOMACIA and CODECHOCÓ, because I collected the data within the boundaries of the department of Chocó. According to Law 99/1993, CARs are responsible for creating planning tools to orient natural resource management under their jurisdictions. Community Councils, as legal authorities over the land, are expected to do the same, within the guidelines of CARs, given that Community Councils correspond to a lower-scale jurisdiction.

Although fishing takes place at the local level, where the jurisdictional authority is the LCC, fish are traded in the market in Quibdó, which is a city under jurisdiction and authority of municipal, departmental, and national governments and offices.

CODECHOCÓ -the CAR of Chocó- is the official environmental government authority in the mid-Atrato basin. Nevertheless, based on local testimonials and observed situations, there are no clear policies or actions from this corporation with regards to fishing. As a matter of fact, this corporation was rarely alluded to when interviewees were asked about external offices that enforce fishing practices. In only a few interviews, local leaders and fishers mentioned programs launched by CODECHOCÓ related to fisheries, all of which failed to be implemented. Interestingly, among these

failed programs, one attempted to regulate the minimum fish size for catch in the Atrato. The enforcement was supposed to take place at the fish markets in Quibdó, where anyone bringing fish who failed to meet the minimum size would have their fish confiscated by the corporation. However, the following leader assessed the effectiveness of the program in the following terms:

It was like many of the things here: while we are still warm-blooded, the first two days, the first month, the first two months, good. From then on, people stop caring, they don't pay attention to that, the cronyism begins, "that's the nephew of my aunty, the little brother", "look, I will give you these ten fish", so "go ahead, pass". Nowadays, the minimum size is no longer controlled.

(Interview local leader, August 2017)

Relatedly, most of the local leaders interviewed emphasized in the interviews how serious CODECHOCÓ's lack of enforcement of fish size regulations in Quibdó's fish market was during the upstream migration season of 2017. During this season, according to most leaders and fishers, the average fish size of large species reached unprecedented low values. Nevertheless, leaders' testimonials suggest that the environmental corporation completely failed to control this situation, as little fish were seen selling everywhere in the city. Only one fisher recalled occasionally seeing the Police during that season confiscating fish or sanctioning fishers who were selling fish under the required size.

All of the interviewees, both fishers and leaders, described CODECHOCÓ as an inefficient authority. However, what they mostly suggested when referring to this corporation was how corrupt it is. They described corrupt practices in licensing, rule enforcement, and sanctioning, where private interests were privileged at the expense of local communities and the environment. Given that little is done by this authority with

regards to fisheries, there is no evidence of corruption in that realm. However, one of the local leaders provided an example with illegal gold mining in which, according to him, CODECHOCÓ was evidently turning a blind eye and failing to enforce sanctions for these actors:

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 people, from the community, what made them take action. Then CODECHOCÓ arrived and confiscated them. But [...] they left them there, "confiscated", and the owners came during the night, with cranes they came, dismantled them, removed the important pieces [...] and with that they went and assembled others somewhere else [...] CODECHOCÓ knows, the Police knows, that they assemble those there in Kennedy [a neighborhood in Quibdó]. Because that ain't something you can hide in your pockets! Those things are massive! And they pass by in front of CODECHOCÓ.

(Interview local leader, August 2017)

The fishermen who compared Tanguí with downstream communities described a completely different situation for the institutions enforced by the government authority there. It is important to remember that these communities belong to a different jurisdiction than CODECHOCÓ. The government environmental office in those areas was described as an active and effective actor at enforcing fishing regulations in the market. In one of the interviews, a fisher who used to fish in downstream communities replied the following when I asked him about the role played by the external authority:

For instance, in Turbo [a downstream riverine town], [...] there you can't bring little fish to Turbo. There, little fish and fish with guts cannot enter the port [...] you've got to eviscerate the fish.

(Interview fisherman, July 2017)

Ultimately, this suggests that the performance of government environmental authorities is not the same across the basin. CODECHOCÓ seems to be performing very poorly compared with other authorities, and this has serious implications, considering that most of COCOMACIA's territory overlaps with the spatial jurisdiction of this corporation.

Illegal groups

As mentioned earlier, people in the Atrato basin historically dealt with the presence of guerrilla groups in their territories. These armed groups were known to impose their rules on the territories they occupied. Particularly, for the case of FARC-EP guerrilla, the most important group in the area, locals from Tanguí are proud and anxious to describe how they resisted and refused to adopt this group's rules, even after this armed group explicitly attempted to impose their regulations in Tanguí.

They did establish rules in other places, but [...] because as I'm telling you, there's a lot of people qualified and involved in the organization, so they weren't able to set their rules in Tanguí. People didn't allow them. We told them they had to respect the community's internal bylaw [...] and that those were the rules valid in our community.

(Interview local leader, July 2017)

FARC-EP's rules were simply not accepted because they had not been created by locals, but imposed by outsiders. This suggests that the Internal Bylaw represented a strong tool for guarding the local territory of Tanguí from "institutional" encroachment, even if armed groups occupied the territory. As such, Tanguí lacks a history of coercive enforcement of fishing regulations by FARC-EP.

However, Tanguí was an exception in this regard. Some of the fishers currently inhabiting Tanguí migrated from downstream communities and in the interviews, they

frequently contrasted Tanguí's current institutional context with the ones that existed in their former communities, where FARC-EP dictated the rules. The following excerpt provides an example of some of the rules that this armed group imposed downstream:

Up here they [FARC-EP] didn't have any. But down there they did, fishing with dynamite or poison was not permitted, nor with anything that could kill the fish in the water. In other words, you had to catch it either with a net, or otherwise trap it in a corral or a trench, but pouring poison in the water to kill the fish, nothing of that.

(Interview fisherman, August 2017)

According to testimonials, the FARC-EP guerrilla was relentless in enforcing its rules in downstream communities. Although local people at the time refused to recognize this group as legitimate or support it in any way, the fishers interviewed acknowledge that people in those communities seemed to have learned to comply with the rules set up by the guerrilla for fishing. This fisherman described how enforcement took place in those communities at the time:

If you breached, you had to go and carry one or two meters of rock, and not just any rock, but large rocks. [...] And no one could help you. If you were asked to bring five meters of rock and maybe your buddy helped you, then he would be asked to bring the same amount, and then he would have to do it on his own. From that perspective, people learned [...] and they feared being punished [...] you had to comply with the rules.

(Interview fisherman, August 2017)

Nowadays, particularly after the peace agreement celebrated in Colombia in November of 2017 between the National Government and the FARC-EP guerrilla, this group has demobilized and no longer operates in the region. When asked about the current situation in the downstream communities after FARC-EP had left, fishers suggested that

the institutions continue to be enforced but were hesitant about whether this would still be the case in the future.

The interaction between COCOMACIA and external entities around fisheries' governance

Despite the evident overlap in the spatial jurisdictions of the government-based entities and COCOMACIA¹⁰, the few mechanisms in the legislation that indicate how these different stakeholders are to coordinate actions have failed to be put in place. In this regard, during the interviews, local leaders mentioned that the law required CODECHOCÓ - the CAR- and IIAP -the Environmental Research Institute-, both entities from SINA with presence in COCOMACIA's territory, to appoint a representative of this Community Council in their Governing Board. In fact, Article 56 of Law 70/1993, later regulated by Decree 1523/2003, requires CARs to elect and include a representative of Black communities in their Governing Boards. Interestingly, though, this Decree explicitly indicates that only one representative for all Black communities under the jurisdiction of the CAR should be appointed. In other words, this seat in the CAR's governing board is not necessarily reserved for a representative of COCOMACIA; it can be taken by a representative of any other Community Council in the region. Interviewees clearly stated that this formal mechanism for participating in the CAR's Governing Board is not currently in place.

Cocomacia must have a member in the Governing Board of CODECHOCÓ.

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¹⁰ It is important to consider that in Colombia, this particular type of overlap in environmental governance jurisdictions only occurs in Black communities' collective territories or in Indigenous Reservations. In most of the national territory, CARs operate as the only environmental authority in their jurisdiction.

[...] As a guarantee, because those are corporations created for natural resources, so the least that should happen is that they should work articulated. [...] That space has been lost and is not articulated. It is not working, but it is in the law, and we need to see how we empower on that, how can we recover that.

(Interview leader, August 2017)

For the case of IIAP, the Research Institute, this mandate was perceived to be working well. Nonetheless, Research Institutes play the role of a consultant within resource governance in Colombia; as such, these institutes have limited capacity in *actual* decision-making. This is not the case of CARs, as these corporations hold regional authority for environmental decision making. In other words, working closer to a research institute does not grant the same scope of participation in decision-making to COCOMACIA as would working with the CARs. A local leader referred to what can be done by working with IIAP and recognized the limitations of work with this type of entity:

In IIAP [...] members of Community Councils participate, the research is conducted and when the process is done, the results are published. Then you need to communicate the information to who is designated to make decisions. [...] That's as far we can go, up to conducting the study and tell them "this is what happens, this is the problem", and then each one operates according to its duty.

(Interview leader, July 2017)

The mechanism of Prior Consultation

As mentioned in the context section, the right to Prior Consultation was granted to any local community in Colombia by Decree 1320/1998. For Black communities organized in Community Councils, this mechanism gains particular relevance and legal strength since these communities are collectively entitled to the land potentially intervened or

impacted. In other words, their right to be consulted is indisputable given their *de jure* property rights over the land.

In principle, Prior Consultation is a mandatory process through which local communities are consulted, before any licenses are granted for interventions that can potentially impact them is undertaken. The application of this process is not restricted to projects that entail a physical intervention in the territories inhabited by local communities. Sometimes Prior Consultation is conducted when administrative processes are likely to affect local communities. These include, for instance, the creation of pieces of legislation or administrative actions involving local communities.

Initially, the need for representation in administrative procedures was what justified the participation of leaders of Black communities in the design of laws during the 1990s. Creating Law 70/1993 and its regulatory decrees, like Decree 1745/1995, clearly required input from Black communities themselves. However, when the rules for Prior Consultation were formally promulgated in 1998, this notion of representation and participation was validated legally and became mandatory. All in all, the mechanism of Prior Consultation has historically granted voice to Black communities. One of the leaders interviewed reflected on what this mechanism has made possible and how things would be for them in its absence.

But if it hadn't been for that regulation, they would've come and done what they wanted, without having a single issue. [...] it at least has served, man, because we have sometimes lacked the capacity, but at least we have had the means, they have had to consult us, and yes, they have done in principle what they have wanted, but not exactly how they wanted. They have done things in the way the community has said they need to be done, because of consultations.

(Interview local leader, August 2017)

COCOMACIA has consistently defended its right to be a part of the ongoing negotiations for writing the rules for chapters of Law 70/1993 not yet implemented. The lack of rules strongly undermines the capacity of Community Councils to translate their concerns and institutions from paper to practice. Particularly critical for environmental governance is the fact that the chapters addressing natural resource management and mining are among those for which no rules have been written. Local leaders expressed skepticism and criticisms about the government's will in promulgating rules for these chapters. There is a generalized belief that rights for Black communities have been granted reluctantly by the central government. A local leader described this feeling, particularly around the mechanism of Prior Consultation:

I think the government has regretted having created rules to implement chapter 3 for Black communities, the chapter in Law 70 that talks about property... because that's how Prior Consultation comes to be and all of that, all of those things that the government doesn't like. So, they say "those communities, those f... blacks do not like development, they oppose development, and now, on top of all, if something is to be done here we have to consult them about how we're gonna do it..."

(Interview leader, August 2017)

Despite the efforts of COCOMACIA and other Black organizations to participate in developing new legislation, the fact that these processes have not been successfully completed reinforces this perception of reluctance and unwillingness on the part of the National Government.

We [COCOMACIA] have made multiple proposals and at different times. We have always been proactive, from when we started with the proposal for Law 70, then the proposal for implementing rules for chapter 3, the proposals for rules for the other chapters, and many others, but there are difficulties for this given the lack of political will. There has never been political will from the National Government for this.

(Interview leader, July 2017)

DISCUSSION

Response of the Community Council to the requirements of collective titling

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). While the first initiatives of decentralization around the world incorporated existing authority structures into the formal process of governance, more recent approaches of decentralized environmental governance were built upon new organizational entities (Lemos & Agrawal, 2006). In Latin America, decentralization was put in place through the formal recognition of the rights of historically-settled ethnic communities to the management of their land under the grant of collective property rights over the land (Larson et al., 2010). This required local communities to form new entities through processes of self-organization of local resource users (Larson et al., 2006; Larson & Soto, 2008; Meinzen-Dick, 2007).

This is an accurate description of what happened in the case of Black communities in Colombia. The decentralization governance reform embodied by Law 70 of 1993 created the figure of Community Councils for Black communities. As such, this decentralization process triggered immense changes in how Black communities would organize thereafter as formal, collective stakeholders in the environmental governance system in their territories.

Prior to the grant of the collective title, the communities nowadays grouped under COCOMACIA exercised management *de facto* rights on their territories. However, these

rights were not necessarily exercised in coordination with the formal decision-making (Communal Boards and ACIA's local committees) and enforcement bodies (Police Inspector) existing in the territories. While Communal Boards got together to discuss issues taking place in the local communities, and Police Inspectors regulated people's behavior, there was not a specific focus of either of these bodies in resource management. Instead, the rules followed by these bodies corresponded to regulations emanated from outside the territories.

Being granted collective property rights over the land drastically changed the institutional landscape for these communities. Studies have shown that the process of collective titling and the constitution of Community Councils has promoted the creation of new rules for the management of Black communities' territories (Vélez, 2011), as the case of COCOMACIA clearly evidences. In COCOMACIA and its LCCs, two kinds of rules have been created. First is rules for structuring the internal organization of COCOMACIA into bodies operating at different levels, each with officers with specific roles within these bodies. The second is specific rules, created at the local level, on how to manage natural resources in the territories. However, this case study also shows that the creation of rules is not enough for effectively empowering these community-based bodies for resource governance.

It would be impossible to understand the emergence of these two types of rules without considering COCOMACIA's history of organization and the conditions in which local communities were living before the process of collective titling. The organizational structure of COCOMACIA is the renewed legacy of an organizational process that

started with ACIA more than 30 years ago. The current organizational structure evidences an ambition of maintaining representation and participation from local communities, despite the large size of the organization. However, COCOMACIA's financial constraints undermine its capacity to celebrate the assemblies and meetings where global participation is at stake.

The rules for resource management are the result of processes occurring at two different levels. At the global level of the collective territory, in the recent years, planning documents have been developed with the support of NGOs. Based on technical environmental assessments, these documents are intended to provide guidance for resource management in the collective territory of COCOMACIA. At the local level, bylaws were created years ago as the result of combined efforts of a select group of local leaders, knowledgeable on law and close to the organizational process, and the local communities, who validated and provided feedback on the process of design and elaboration of the rules. Nevertheless, it is unclear from the evidence whether these two levels are effectively connected in practice. This would reinforce the idea that the different levels of COCOMACIA are facing challenges for working in a coordinated manner.

Current institutional landscape for governing inland fisheries

Despite the major changes in COCOMACIA's organizational structure triggered by the collective title and the creation of rules at different levels, these processes seem to have

had little effect on fisheries governance in the territories. Table 5 provides a synthesis of how the main property rights over fisheries are being exercised by COCOMACIA.

At the operational level, there is no evidence of restrictions on the right to enter fishing spots nor the right to catch fish within the collective territory. However, recall that at the collective-choice level, Community Councils hold title to collective territories that are inalienable, which limits options for restricting entry.

Table 5. Property rights of COCOMACIA for inland fisheries.

Right	Inland fisheries' governance in COCOMACIA	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	
Management	Institutions created for regulating fishing gear, mesh size, minimum fish size, but little enforcement of these regulations	Collective- choice
Exclusion	No institutions for limiting who has access rights to fishing spots, as surface waters are public domain by law. Also, the use of fish resources is granted by law, i.e. it does not require of a permit or license.	
Alienation	No rights to sell or lease either of the above collective-choice rights, as the collective territories are unalienable by law.	

In practice, the situation for the collective-choice rights for management and exclusion is more complicated. As part of the exercise of the right of management, COCOMACIA as a whole and the LCC of Tanguí have, indeed, developed guidelines for sustainable fishing and regulations for fishing. However, these institutions at the local level are not being enforced within the collective territory nor outside of it, in Quibdó, where the most important fish market is located. In fact, the environmental agencies and offices with jurisdiction in Quibdó do not even have clear regulations or programs in place to manage fisheries.

The literature points out that scale is a crucial element to consider for decision-making around resource management, given that natural resources differ in their distribution patterns and dynamics across space and time (Folke et al., 2007; Larson, 2003; Lovell et al., 2003). For the case of inland fisheries, the mobility of the resource (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 its management (Béné & Neiland, 2006). Within the collective territory of COCOMACIA, therefore, decision-making around fish resources should ideally take place at the basin level, integrating different LCCs. This would correspond to the spatial scale at which key ecological dynamics such as the upstream migration occur, upon which the fisheries, and therefore the local economies, rely. However, that is not the case.

Although COCOMACIA holds great potential for facilitating dialogue and rule-creation between communities located in different portions of the Atrato basin, given the extension of its territory, there is no evidence of initiatives of this nature currently taking place in the collective territory. This is, presumably, one of the many consequences of the limited financial capacity that the Community Council has for holding community-wide meetings. However, the fact that COCOMACIA's territory falls within the jurisdictions of two different government environmental agencies may also explain why decision-making around fisheries is fragmented and disconnected in the Atrato basin. While there is very limited evidence of enforcement of fishing regulations in Quibdó by the environmental authorities, the CAR in the lower portion of the basin was described

by the fishers as a more effective authority in monitoring the activity and enforcing regulations. In turn, the institutional contexts in which fishers located in different portions of the basin operate are clearly different, and so might be the behaviors of fishers in response to regulations for fishing.

At the local level, fishers emphasized two important drivers of fish stock declines: high rates of extraction of fish, and changes in the water caused by mining. For the first driver, there are regulations in the Internal Bylaw of Tanguí that aim to prevent negative practices among local fishers. These rules mostly refer to restrictions on fishing gear and on the specific areas for setting the nets, depending on the season. For these rules, however, monitoring seems to be occasional and sometimes even coincidental. The extension of the hydrographic complex and the lack of financial means to aid fishers or local leaders in doing this job makes it unfeasible to perform monitoring on a regular basis. Furthermore, when monitoring occurs, it is conducted as a reciprocal task among fellow fishers, i.e. it becomes a mechanism of social control. But under the current conditions of scarcity of the fish resource, the execution of this task poses a dilemma for fishers, which ultimately hinders their capacity for enforcing the regulations. Moreover, the Local Board in Tanguí has evidenced difficulties enforcing the sanctions stipulated in the Internal Bylaw once informed of infringement. As such, monitoring and enforcement at the local level for fisheries' institutions is currently very weak. On top of this, there is no monitoring of or enforcement of rules about fishing catches by external authorities occurring in the fish in Quibdó. Enforcement of the rule of minimum fish size

has been attempted in Quibdó's market, but it has also failed to be implemented and sustained.

However, there is an exception to this. The informal institution that prohibits the use of diving masks and harpoons for fishing (which is the method used by Indigenous fishers in the territory) appeared to be the only rule for which I found evidence of effective enforcement by Black fishermen. Although the data collected does not provide enough detail to answer to these inquiries, this exception suggests that elements of ethnic identity are intertwined with rule recognition, compliance, and enforcement in the territory. In this case, ethnic identity influences who participates in making decisions about rules. Black fishers (majority) are enforcing the institutions 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 also calls attention to the notion of legitimacy, as it seems like Indigenous fishers and Black fishers deem different bodies of regulation as 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 an 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 second driver of fish depletion, sedimentation and water contamination, is associated to the widespread illegal practice of mechanized gold mining in the Atrato

basin. As such, it constitutes an external disturbance for the fisheries system, which poses a clear challenge for its governance (Béné & Neiland, 2006). Resource-users (fishers) and/or local representatives, or even COCOMACIA as a whole (stakeholders in the resource governance) lack the capacity to control the decisions made for this activity. Not only some of mines are located beyond the jurisdiction of COCOMACIA; in terms of the law, the fact of it being an illegal activity makes its control to fall entirely under the competence of government authorities with coercive power.

Importantly, monitoring and enforcement of the agreements contained in the environmental license given to mining enterprises is done by the CARs. For the Atrato basin, CODECHOCÓ is the corporation in charge of performing these tasks. However, local leaders described CODECHOCÓ's performance in controlling mining practices as very poor and rife with corruption. The dysfunctionality of CODECHOCÓ is coupled with the participation of armed crime groups in gold mining. The owners of the mines pay extortions to these groups to have them safeguard their operations, which further hinders law enforcement and feeds corruption. It must be said that the presence of armed groups also threatens local communities and discourages them from intervening or reporting the incursion of the armed groups into their territories.

The exclusion issue

Fishing regulations in Tanguí exclusively target local fishers. There are no explicit rules restricting access of outsiders to fish resources within the territory. Although some of the fishermen interviewed suggested that outsiders need to know someone in the local

community in order to enter its territory and fish, most fishermen explicitly indicated that anyone could enter the territory and fish. According to the fishers, local territories do not experience permanent encroachment from outsiders for fishing. However, outsiders arrive to fish during the upstream migration season, which was suggested to be the time of the year in which the pressure on fish resources is the greatest. Furthermore, this season was described as a time in the year when monitoring and enforcement mechanisms are rarely put in place, as everyone in the local communities is devoted to fishing all day long. In addition, the Atrato River represents an artery for the local communities in COCOMACIA and for other local communities in the area. This condition makes it infeasible for local communities to restrict the use of the Atrato River for transportation purposes, which leads to opportunities for outsiders to navigate the river system and fish.

From a legal perspective, limiting access to the fishing spots in the Atrato basin is also infeasible. In Colombia, all bodies of surface water are public domain, with very few exceptions, according to Decree 2811/1974. Furthermore, according to Article 9 of Law 70/1993 (Chap IV), despite that rules have not been written for this chapter, any traditional practices used on the waters or beaches, or on the terrestrial or aquatic fauna/flora for food, are considered legal uses, and, as such, do not require licenses or permits. As a result, the right of exclusion from fisheries by Community Councils is constrained by the law itself.

Something similar occurs with mineral resources, like gold. As described before, gold mining is closely related to fisheries, for illegal mining has become a driver of

declining fish stocks. Besides the fact that illegal resource extraction activities can only be controlled by coercive authorities, even legal mining, in general, is an activity whose control falls out of the realm of Community Councils. The National Constitution (Art. 332) indicates that the State owns the underground and the non-renewable natural resources in Colombia, among which gold and other minerals are included. As such, it is the State and not Community Councils, who is entitled to grant permission for mining in Colombia.

In Colombia a gold mine requires two licenses before it can start to operate: first, a mining license, granted at the national level by the National Mining Agency (Agencia Nacional de Minería) and second, an environmental license, which depending on the size of the mine can be granted at the national level by the National Agency of Environmental Licenses (Agencia Nacional de Licencias Ambientales) or at the regional level, by CARs. Community Councils only become stakeholders for mining enterprises in their territories through the mechanism of Prior Consultation, which, as mentioned before, has not been infallible at safeguarding local communities' interests against the interests of outsiders (Pirsoul, 2017; Walter & Urkidi, 2016; Weitzner, 2017). Once more, Community Councils' right of exclusion over gold mining is constrained and diminished by the law itself.

Figure 7 summarizes the capacity that COCOMACIA has for excluding potential users (outsiders) from the different resources governed in the collective territory. The upper level of the figure shows this relative capacity based on the *de jure* rights granted by law and considering an ideal situation of resource use (i.e. legal use). Meanwhile, the

lower level reveals the actual situation in the practice, considering the circumstances in which the resources are accessed and used in the territory. According to this, the capacity of COCOMACIA for excluding outsiders who may affect directly or indirectly the fisheries is very low.

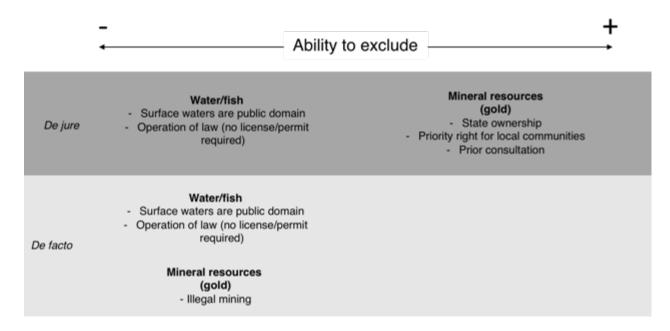


Figure 7. Comparison of de jure and de facto ability of COCOMACIA to exclude potential users of the fish and mineral resources in the territory. The capacity increases from left to right.

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 the environmental ones. When the machinery has been already settled in the riverbed and the gold mines are established, sometimes local communities resign themselves to allow them to operate, even if the operations entered without their consent. The reason for this is that the mine operators

pay the communities a portion of the gold extracted. In a context where the absence of the State has historically been the rule, and never the exception, illegal gold mines have represented one of the few sources of income for local communities. Considering the precarious conditions in which some of these communities live to meet their basic needs, illegal gold mines appear to provide people with the access to primary infrastructure, which was previously neglected by the State. This, in turn, changes people's perception of the illegal mines and ultimately justifies their illegal operation within their territories.

Capacity for action of COCOMACIA in fisheries governance

As an entity part of a regional governance system, COCOMACIA's capacity for action within the system is not only defined by what it can do by its own means in resource management, but also by what can be achieved through negotiations and collaborations with other stakeholders. The institutional context in which COCOMACIA is embedded is a result of how the roles and responsibilities between the organization and other stakeholders in the region have been negotiated in practice. Although all of this process was triggered by the promulgation of laws at the National level, "governance is not simply *decided from above*" (Béné & Neiland, 2006, p. 1). By following the realist view of power (Raik et al., 2008), this study attempts to place emphasis on this process of negotiation to explore the ability of COCOMACIA to maneuver and make choices within the structured social relations in which this organization is embedded. Given that COCOMACIA operates under a legal framework in which the rights are granted by the

central government, COCOMACIA's ability to maneuver and make choices is certainly conditioned by the formal and informal institutions through which the different stakeholders for resource governance operate. Table 6 provides a complete summary of the institutional context within which COCOMACIA is embedded. It is interesting to note that the different institutional levels do not necessarily correspond with the geographic areas over which they operate.

Table 6. Institutional context of COCOMACIA for fisheries governance. Based on Clement, 2010.

Actors/Instances	Institutional level			Geographic Area
	Operational situation	Collective-choice situation	Constitutional situation	
Central Government (Executive and Legislative bodies)		De jure: participates in designing and then approving the regulatory decrees for Law 70	De jure: Decides who is eligible to apply for collective titles De facto: Decides how unregulated issues around resource governance are resolved, in the absence of legal guidelines.	National
Ministry of Mines		Grants mining licenses (Exclusion)		National
Ministry of the Environment		Grants environmental licenses for large-scale mining projects (Exclusion)		National
CODECHOCÓ		Grants environmental licenses for small-scale mining projects (Exclusion) Controls and enforces management agreements on environmental licenses Controls and enforces fishing regulations	Supervises the implementation of sustainable and conservation practices in its jurisdiction	Department of Chocó
Police		Support the enforcement of environmental regulations by coercive means		National
COCOMACIA		Participates in designing the regulatory decrees for Law 70 (administrative Prior Consultation) Designs planning tools to provide guidelines for resource management	Decides resolutions and directives on how decisions are made within COCOMACIA's territory and by which instance they are implemented Supervises the implementation of	Global collective territory of COCOMACIA

Table 6 (cont'd)

		Endorses or revokes the permissions given by LCC for exploitation of natural resources in the collective territory	the governance and management guidelines	
LCC	Fishing Artisanal mining	Implements the guidelines provided by COCOMACIA for making decisions and for managing resources Designs the Internal Bylaw for fishing and for decision-making at the community level (management right) Grants or denies permission for mining entrepreneurs to exploit gold in the local territories (exclusion right) Controls and enforces (or not) fishing regulations (management right)	Decides resolutions and directives on how decisions are made within the LCC territory and by whom they are implemented	LCC territory

It is in the realm of the negotiations between stakeholders where co-management takes place. In turn, accountability mechanisms take center stage in co-management schemes, as common goals lead to a share in responsibilities, and each party is expected to do its part of the job for the goals to be achieved. Accountability has been a leitmotif in the decentralization literature (e.g. Agrawal & Gibson, 1999; Andersson et al., 2014; Larson et al., 2015, 2007; Ribot et al., 2006). The concept of 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" (Béné & Neiland, 2006, p. 33), provides an appropriate tool for describing the extent to which COCOMACIA gets to maneuver among these other stakeholders. If the effectiveness of decentralization depends on constructing accountable institutions at all levels of government and a secure domain of autonomous decision making at the local level (Ribot et al., 2006), downward accountability is required to exist both within the organization and between the organization and the rest of actors within the governance system.

COCOMACIA's internal structure was conceived with the aim of distributing decision-making and power among the multiple communities that are covered by the collective title over the land. However, achieving participation in the practice has not been as straightforward as it was intended when the organizational structure was conceived. The high transaction costs within the organization, coupled with the lack of financial autonomy, have undermined the connectivity between the decision-makers at the global level of COCOMACIA and the local communities. The weakening of these

links has resulted in different threats to participation, representation, and therefore to downward accountability within the organization.

In addition to this, for reasons discussed throughout the document, a sustained monitoring and enforcement of regulations has not been the case in Tanguí, nor has it been the case in Quibdó. In these two settings, rule enforcement around fishing only occurs sporadically. In particular, issues related to access to fishing spots stand out for being frequently referred to as responsible for fish stocks depletion, while at the same time being absent from the formal and informal prescriptions recognized in the territory for fisheries. This situation has contributed to what fishers perceive as an unsatisfactory response from the LCC to the drivers of fish depletion in the territories.

However, this is only one side of a multifaceted problem. COCOMACIA's capacity for guarding its territory from outsiders is, in fact, fairly limited. Particularly for gold mine encroachment, this limited capacity is coupled with a high dependence on the intervention of external authorities. Yet, the actions from these authorities at the local level are inefficient and rife with corruption. Presumably, the lack of sustained enforcement at the local level has contributed to weakening the perceived capacity of management of Local Boards in the local communities; likewise, the lack of sustained enforcement of fish regulations in Quibdó and mining regulations in the basin has reaffirmed the lack of capacity for management of government environmental authorities at the municipal, regional, and national levels.

With regards to the external stakeholders that are a part of the governance system, CODECHOCÓ and 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 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. 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 action in resource governance.

Black communities in general, and COCOMACIA in particular, have sufficient reasons to have little trust on the Colombian State. Not only did the State fail to guarantee land access to Black Peoples prior Law 70/1993, but it continues to fail at securing the acquired rights by neglecting rule writing for several chapters of the law. The pending regulations have held in abeyance the prominent role that Community Councils were supposed to play after becoming formal stakeholders in resource governance in their territories more than 20 years ago, with Law 70/1993. Until rules are written, Community Councils are structurally handcuffed in their actions around resource governance. These rules are the ones that will establish the specific responsibilities for Community Councils as legal stakeholders in resource governance at the local and regional level. However, effective accountability mechanisms cannot be implemented between stakeholders without responsibilities being clearly delineated (Suškevičs, 2012).

In addition to neglecting rule writing, there are mandates with clear rules that are not put in place by the State. Law 70/93 explicitly behests Community Councils to

participate in executive meetings within CARs and other environmental offices with overlapping jurisdictions with collective territories. This could be taken as an additional opportunity provided by the law for creating accountable relations between stakeholders. However, as mentioned earlier, this mandate is not currently enforced for COCOMACIA. The government is, by law, supposed to provide the funds for an officer of COCOMACIA to be formally appointed in this position, but there is no evidence of this ever being in place. By not participating in these executive meetings, the organization is kept on the sidelines of resource governance decision-making and further limited in its already narrow capacity to maneuver within the governance system. Not only does it fail to communicate first hand with other authorities for decision making, but COCOMACIA is prevented from exercising oversight and control over the actions undertaken by other stakeholders. This is aggravated by the fact that these stakeholders have a reputation of being corrupt in their operation.

In light of all of this, it seems like the institutional mechanisms currently available for Community Councils to hold external authorities accountable are insufficient.

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 commensurate with such responsibilities. However, that is not the case, at least in the context of COCOMACIA. To date, Prior Consultation has been the point of leverage by default for COCOMACIA. This mechanism, as well as other spaces of participation between local communities and the National Government have proven to be ineffective for holding external authorities accountable, as has been suggested by

other studies (Pirsoul, 2017; Walter & Urkidi, 2016; Weitzner, 2017). Moreover, Prior Consultation does not come into force in cases of inaction by external authorities, like the many described in these pages, which leaves Community Councils with no actual means for holding authorities accountable. Ultimately, if accountability is considered as a necessary criteria for earning legitimacy (Suškevičs, 2012), COCOMACIA's legitimacy in its immediate governance context is clearly being undermined by how the interaction among stakeholders is set up in the legislation and put in practice.

This case study suggests that the decentralization process that took place in Colombia is halfway through. This finding supports the need to unpack the notion of decentralization implied in the literature, as there are different processes and stages of decision-making that can be decentralized in resource governance (not just one), 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 decentralized, as the case study portrays for the case of fisheries. There is an evident need to enhance accountability mechanisms among decision-making bodies within COCOMACIA, as well as to create and implement them between different stakeholders in the governance system of fisheries. Importantly, these findings do not imply that the situation faced by COCOMACIA and/or other Community Councils for governing other resources is the same than for fisheries. Future studies should explore the specific governance challenges that are posed to Community Councils by other resources, and what

institutional arrangements and enforcement mechanisms can effectively help address them in the practice.

FINAL REMARKS

The changes experienced by COCOMACIA in response to the decentralization process of territorial collective titling need to be interpreted under the light of a historical and political context. In the first place, it must be said that the response of COCOMACIA to the institutional requirements posed by Law 70/1993 and Decree 1745/1995 is laudable. The innovative organizational structure of COCOMACIA and the detailed internal bylaws developed at the local level have become a model among Community Councils. The experience and leadership of the organization as a whole has granted COCOMACIA with prestige among other organizations of Black communities. This, in turn, has vested in this Community Council the opportunity of becoming a stakeholder in spaces where other community-based organizations are not always invited to participate. In that sense, COCOMACIA's push to position itself as an influential stakeholder in the governance system is remarkable.

But despite these efforts, financial constraints, limited spaces for participation in decision-making at the regional level, and the lack of effective accountability mechanisms seem to be limiting the capacity for action of COCOMACIA in governing its territory. These factors hindering the role of COCOMACIA in resource governance relate to actions failed to be undertaken by the Colombian central government. This supports the assertion that the Colombian state has double standards *vis-à-vis* Community Councils (Pirsoul, 2017). While in the paper the state seeks to empower Black communities, it structurally constrains their empowerment process by conditioning the way in which laws are translated into the practice. This finding also supports the

caveat on not overlooking the role of the State (either through action or omission) in decentralized governance schemes (Baker & Eckerberg, 2014).

The decentralization of environmental governance in Colombia failed to account for the particularities of the ecosystems that exist in the territories, which pose specific challenges for resource governance based on its own dynamics. Disregarding the ecosystem features has also lead to the omission in the policy of the need of different sets of institutional arrangements put in place by different actors in a coordinated way. Specifically, this study provides evidence for these two weaknesses in the decentralization policy through an exploration of the current situation around inland fisheries in COCOMACIA. Inland fisheries are key, as fishing is an essential livelihood for the communities of COCOMACIA. The evidence gathered suggests that this resource is being depleted, compromising the subsistence of these riverine communities. This situation calls for urgent responses which, according to the findings, should be undertaken at different levels and by different stakeholders. In general, COCOMACIA chose to operate with prescriptions for resource management to be enforced at the very local level by LCCs. However, 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. Particularly, enforcement of regulations outside the collective territory and by other stakeholders (e.g. at the fish market in Quibdó) represents an urgent need to be met. Moreover, fisheries involve the governance of rivers, which are spaces of public domain where access is hard to be regulated. This condition, specific

to fisheries, clearly limits the actions that can be undertaken by Community Councils at excluding actors who threaten the resource. These challenges stress the need of a comanagement 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. Future studies should explore the specific governance challenges that are posed to Community Councils by other resources, and what institutional arrangements and enforcement mechanisms can effectively help address them in the practice.

Ultimately, this case study stresses the need of unpacking the notion of decentralization in the literature. It calls attention on the importance to specify the processes of decision-making that are being addressed in decentralization studies, as governance entails different stages of decision-making that take place at varied scales and operate at different paces. The case study showed that institutional design and enforcement of institutions constitute different stages involving decision-making.

Decentralizing institutional design does not necessarily lead to a decentralized enforcement of institutional arrangements. In fact, for the achievement of a fully decentralized resource governance regime, sustained efforts must be placed in redistributing the design of institutions, the duties related to the enforcement of these institutions, and the accountability mechanisms at hand for the stakeholders involved in the process. Overall, this study provides an example of how notions of institutional analysis and governance enable exploring power dynamics in decentralized regimes. However, it is crucial for researchers on decentralization to explicitly indicate what

definition of power they follow in their studies, as this important concept may otherwise be diluted and overlooked. Finally, this study contributes to enlarge the knowledge on inland fisheries' governance, which to date is rather limited, particularly within studies of decentralization (Bene, 2004; Béné et al., 2009; Béné & Neiland, 2006).

APPENDICES

APPENDIX 1

Coding scheme

Table 7. Coding scheme

RQ	TOPIC	CODE	TAG	DEFINITION	RULE
1	Organizational	Formal positions within	Position	Descriptions of the formal	Include statements
	structure	COCOMACIA's		individual positions (ranks and	describing these formal
		structure		roles) existing within the	positions and the
				organization and the	corresponding
				processes through which	election/position
				these positions are assigned.	allocation processes.
		Instances (boards and	Instance	Descriptions of the formal	Include statements
		committees) within		instances (boards and	describing these
		COCOMACIA's		committees) existing within the	boards and
		structure		organization and their	committees, who
				territorial jurisdiction (the limits	composes them, and
				within which authority may be	the territory limits over
				exercised).	which they can
					exercise authority.
		Community	Partic	Mechanisms through which	Include statements
		participation		community members not	describing the
				occupying a formal position	mechanisms through
				within the organization can be	which the community
				part of decision-making or	as a whole is informed
				provide their inputs to	of decisions made, and
				processes.	made a part of decision
	Duda da sissa	Dula dasima musasasas	Danima	Description of mile median	making processes.
	Rule design	Rule design processes	Design	Description of rule-making	Include statements
				situations in terms of the	describing how rules
				protocol followed, people	are made, selected,
				involved in it, and the	created, adopted, who
				participation mechanisms.	participates in these
					processes, and how
					they participate.

Table 7 (cont'd)

2	Capacity of action/Authority	Enforcement mechanisms within COCOMACIA	Enfo_COCO	Strategies and actions undertaken by COCOMACIA (at any level of its internal organization) for rules to be followed and/or sanctions to be applied effectively.	Include statements describing the mechanisms of rule enforcement put in place by COCOMACIA and its internal instances.
		External mechanisms for enforcement	Enfo_ext	Strategies and actions undertaken by any office/agency external to COCOMACIA for rules to be followed and/or sanctions to be applied effectively. Limit these to mechanisms for enforcing rules regarding fish or timber harvest/extraction.	Include statements describing the mechanisms of rule enforcement put in place by other offices/agencies.
		Situations of unenforcement	Unenfo	Failures in the effective enforcement of rules in the territory, either by COCOMACIA (at any level of its internal organization) or an external office/agency. Include explanations and reasons adduced for this to happen.	Include statements describing situations in which the mechanisms of enforcement fail to be applied or do not work. Include any explanations given in this regard.
		Monitoring activities within COCOMACIA	Moni_COCO	Mechanisms employed by COCOMACIA (at any level of its internal organization) for collecting information and feedback on the actions undertaken by different resource-users towards the resources in question, and the	Include statements describing the mechanisms through which members of COCOMACIA (all community members) collect information on the conditions and

Table 7 (cont'd)

			conditions of the resource systems.	state of the fishing and timber resource
				systems and the techniques used for
				harvesting/extraction.
	External monitoring	Moni_ext	Mechanisms employed by any office/agency external to	Include statements describing the
			COCOMACIA for collecting	mechanisms through
			information and feedback on	which offices/agencies external to
			the actions undertaken by different resource-users	COCOMACIA collect
			towards the resources in	information on the
			question, and the conditions of	conditions and state of
			the resource systems. Limit	the fishing and timber
			these to mechanisms for monitoring fish or timber	resource systems and the techniques used for
			harvest/extraction and	harvesting/extraction.
			resource systems.	narvosting/oxtraction.
	Perceived legitimacy or	Legit	The extent to which there is a	Include statements
	lack thereof of		generalized perception or	reflecting opinions on
	COCOMACIA's elected		assumption that the actions	how do people feel
	instances		and decisions of	about the decisions
			COCOMACIA's boards and	made by formal leaders
			elected community leaders	and instances in COCOMACIA in terms
			are desirable, proper, or	
			appropriate within some socially constructed system of	of representation, common good,
			norms, values, beliefs, and	fairness, inclusiveness,
			definitions (Suchman, 1995, p.	and moral values.
			574 in (Larson et al., 2015).	

Table 7 (cont'd)

T	"Final say" in decision-	Final cov	Who has the final say in	Include statements
	,	Final_say	,	
	making		decision-making, both in the	describing who
			paper and in the practice.	(individual or entity)
				has the finally say in a
				dispute regarding
				resource management.
	Informal leaders	Inf_lead	People involved in decision-	Include statements
			making without holding a	describing the role of
			formal position within the	someone who is not
			structure of COCOMACIA.	formally elected as a
			This includes a description of	leader, but who has an
			the decisions made by these	important incidence in
			leaders, and the reasons for	decision-making or
			them to be included in such	who is consulted for
			processes.	decision-making.
				Include descriptions of
				the decisions made by
				these leaders, and the
				reasons adduced for
				them to be included in
				such processes.
	Internal accountability	Int account	The extent to which elected	Include statements
	•		leaders, boards, and officers	reflecting opinions of
			within COCOMACIA are	people on: the
			willing to accept responsibility	decisions made by
			or to account for one's actions.	formal leaders or
			This includes two	instances within
			components: a) the attitudes	COCOMACIA on
			and responses of elected	behalf of the
			leaders, boards, and/or	community, the
			officers when confronted for	attitudes of these
			decisions they have made; b)	leaders/instances when

Table 7 (cont'd)

				111	
				the transparency of processes	confronted for
				of decision-making, so that	decisions made, or the
				community members are	ways in which people
				aware of the actions and	can keep track of what
				choices of their elected	COCOMACIA decides
				leaders, boards, and officers.	and how they decide.
		Capacity of holding	Ext_account	The extent to which officers	Include statements
		external authorities		and/or entire organizational	describing the means
		accountable		entities external to	through which
				COCOMACIA are considered	communities, leaders,
				to be willing to accept	and instances of
				responsibility or to account for	COCOMACIA can hold
				their actions. This includes	external authorities
				two components: a) the	accountable. In other
				attitudes and responses of	words, what
				officers and/or entire	mechanisms they have
				organizational entities when	to keep track of
				confronted for decisions they	external authorities'
				have made; b) the	procedures and
				transparency of processes of	decisions, and how
				decision-making, so that	they get to complain
				community members are	when things are not
				aware of the actions and	done appropriately.
				choices of the officers and/or	
				entire organizational entities.	
3	Fishing	Fishing norms	Fish_norm	Prescriptions about actions or	Include statements
				outcomes, generally acquired	indicating how fishing
				in the context of a community	should be done or what
				(Ostrom, 1992), that indicate	things should be
				the "accepted way" of doing	avoided when fishing
				things (North 1990), or the	(e.g. times, gear,
				way one <i>should</i> do things	species, size, places)

Table 7 (cont'd)

Fishing rules	Fish_rule	(Ostrom & Basurto 2011). In case of non-compliance to these norms, there is no explicit sanction assigned (Crawford & Ostrom, 1995; Schlüter & Theesfeld, 2010). In this case, the norms have to be related to fishing or conservation of fish resources. Prescriptions that forbid, permit, or require some action or outcome, that carry an additional, assigned sanction if forbidden actions are taken and observed by a monitor (Commons 1924). As such, rules are the product of rule-making situations, entail some kind of monitoring, and sanctioning processes must exist (Crawford and Ostrom, 2005; Basurto et al. 2009). In this case, the rules have to be related to fishing or management of fish resources.	without explicit/clear consequence in case of breach. Include statements indicating how fishing must be done or what things must be avoided when fishing (e.g. times, gear, species, size, places) with an explicit mention of the according consequence in case of breach.
Conditions of the fishing resource system	Cond_fish	Characteristics and state of the fishing system, including changes in time, problems associated, and descriptions of the system itself in terms of	Include statements describing the abundance/scarcity of the fish resource, the ecological conditions that enable the fish

Table 7 (cont'd)

			ecological structure and functioning.	resource to be maintained, the state of the ecosystems supporting the fish, and the perceived threats to these ecosystems.
Levels of action situation	Operational level	Opera	Rules and norms directly affecting resource access and use (Ostrom, 2005b; Schlager & Ostrom, 1992).	Include statements that describe agreements that constrain or indicate if and how resources can/should be accessed and used.
	Collective-choice level	Collec	Rules and norms for: creating rules regarding resource access and use, and making other resource management and exclusion decisions (Ostrom, 2005b; Schlager & Ostrom, 1992).	Include statements that describe: how rules for resource access and use are designed and how are decisions made regarding resource management and exclusion.
	Constitutional level	Consti	Rules and norms devising who gets to participate of collective-choice actions. This level includes the creation or establishment of an organization or a collectivity entitled of making management and exclusion decisions (Ostrom, 2005b; Schlager & Ostrom, 1992).	Include statements that describe rules and norms that indicate who gets to participate of collective-choice actions or who (individual, group and/or organization) is entitled to make collective-choice decisions.

Table 7 (cont'd)

	Compliance	Motivations/incentives for rule compliance	Compli	Reasons adduced for the conformity of people in fulfilling the requirements posited by the rules.	Include statements in which people describe what motivates them to follow rules or comply to them.
		Opportunistic behaviors	Opportu	Strategies adopted in order to obtain disproportionate benefits from resource extraction/harvest at the cost of others (Ostrom 1992). Includes: free riding, rent seeking, and corruption.	Include statements describing free-riding behaviors, rent seeking and corruption, and any other behavior in which individuals privilege personal gains over the common good.
		Motivations/incentives for non compliance of rules	Non_compli	Reasons adduced for the non- conformity of people in fulfilling the requirements posited by the rules.	Include statements in which people describe why a rule/norm is overridden.
*	Context	Historical process of organization	Organ	Details of the events in which the community actively participated, that preluded the achievement of the collective title.	Include statements that refer to the previous stages of organization that the leaders and the community went through prior receiving the title.
		Politico-economic context	Pol-Econ	Market incentives, and government decisions, attitudes, and plans regarding productive and economic activities in the region.	Include statements in which policies, attitudes, decisions made by the government refer to privileging or hindering the development of

Table 7 (cont'd)

			economic activities.
			Also, include
			statements where fish
			and timber markets are
			described.

APPENDIX 2

Description of the instances within COCOMACIA

Table 8. Description of the instances within COCOMACIA, based on COCOMACIA, 2009, 2016; Consejo Comunitario Local de Tanguí, 2015.

Jurisdiction	Instance	Description	Duties	When they officiate	Criteria to be elected as an officer
Global Collective Territory	General Assembly	- Highest authority in COCOMACIA - Composed by: - Board of Directors - Legal Representative - Group of elected representatives of the local communities	 Elect the Board of Directors, Disciplinary Committee, and the Legal Representative. Revoke any elected officer in case needed. Approve or revoke any decision made by other instances within COCOMACIA. Approve the bylaw for the use and transfer of usufruct permits of the land. Serve as ultimate instance for conflict resolution. Provide political and organizational quidance. 	 Ordinary meetings: every 3 years. Extraordinary meetings: when needed. Informative gatherings: yearly. Decisions made preferably via consensus, otherwise, via majority vote. 	- 18 years or older - Belong to a Black Community affiliated with COCOMACIA: be born in any community covered by the collective title or having lived for no less than 10 years in the territory, adopting the cultural practices of the local social groups; - Be literate
	Disciplinary Committee	 Supervisory body of COCOMACIA Composed by: Three (3) chief officers Two (2) substitutes 	 Investigate alleged acts against the Internal Bylaw. Sanction any impropriety within the organization. Report on the performance of the different instances 	- Officiates permanently from Quibdó.	- Cannot be simultaneously appointed in any public position (except teachers) - Be knowledgeable on Law 70 of

Table 8 (cont'd)

General Board of Directors - Main administrative and executive instance in COCOMACIA - Composed by: - An elected representative of each administrative zone (9 in total) - Legal Representative	- Review the account books (every three months) Conduct training workshops for the Board of Directors, Zonal Committees, and LCCs in disciplinary procedures Work with external authorities and stakeholders - Coordinate actions among the local communities and between external actors and local communities Inform the Disciplinary Committee about irregularities occurring at lower instances Enforce sanctions imposed by the Disciplinary Committee Guide local communities in peaceful conflict and dispute resolution Report on its activities to LCCs (every three months).	- Cannot own a sawmill - Cannot have any family ties with any other elected officer - Elected every three years
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Table 8 (cont'd)

	Legal Representative	- Elected officer representing COCOMACIA at judicial instances.	 Report on its activities to LCCs (every three months). Sign formal accords and contracts, prior written authorization from the GBD. Play a leading role in the GBD for decision making and execution Maintain communication among instances within COCOMACIA 	- Officiates permanently from Quibdó.	
Administrative Zone	Zonal Committee	 Intermediate instance between the GBD, Disciplinary Committee, and LCCs. Composed by: A representative of each LCC in the zone. 	 Lead activities and gatherings at the zone level. Provide advice and training for LCCs Report on the activities at the zone level to the GBD (every four months). 	- Meetings at least every three months, or when needed.	
LCC	Local General Assembly	- Highest authority in the LCC - Composed by: - All the inhabitants of the LCC - Local Board of Directors	 Elect the Local Board of Directors and Legal Representative Approve or disapprove projects and programs to be executed in the local territories. Approve or disapprove the creation or modification of 	 Ordinary meetings: yearly Extraordinary meetings: when needed Informal informative gatherings: every other month, attendance is not enforced but encouraged. 	

Table 8 (cont'd)

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