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# Fishing in Privatized Seas: environmental problems, local communities, and challenges for sustainability in the Colombian Caribbean

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## Abstract

This paper studies the complex socio-environmental realities faced by the coastal peoples of a fraction of the Colombian Caribbean (Cartagena) that has been rapidly transformed by the tourism industry, the creation of protected areas, port policies and hydrocarbon transport. Focusing on the insular system of Barú, a region inhabited by ethnic groups that aspire to obtain state recognition, we will show how regulatory decisions link the coasts and the sea to models of privatization or nationalization that introduce ecosystem management regimes that collide with local practices and traditional ways of life. The aggravating factor is that many of the models analyzed in the northern coast of Colombia are presented as sustainable models, but, in practice, they degrade natural systems, limit social participation, and prevent the reproduction of collective livelihoods and ways of life. Methodologically, this study is based on the analysis of spatial information and fieldwork -with an ethnographic approach- carried out between July-September 2021 with local communities, which allowed identifying the main problems for the social, cultural, and ecological sustainability of coastal and maritime areas. Theoretically, this work is based on an intercultural approach and uses the social-ecological systems framework to determine the main challenges for coastal management, collective rights, and the emerging field of research on rights to the sea. Fishermen, as good connoisseurs of adversity, generally rework their practices and adapt to gradual or abrupt changes in ecosystems, but find it more difficult to maneuver with changes in governance structures, given the asymmetrical relationship with the State or the private sector. Local people seek to reclaim fishing and navigation beyond just a trade activity. Fishing is only a small part of their relationship with the sea; a large part of their identity practices require the sea for to survive.

**Keywords:** *Sustainability; Caribbean Sea; Coastal regulation; Collective rights; Maritorium*

## 1. INTRODUCTION

In the Colombian Caribbean, the shaping of the landscape and the history of use of the large river basins have created human communities with a close connection to water. Experts call them amphibious cultures to show that this is a complex and adaptive way of life to water based regimes (Ricaurte *et al*, 2019). However, little has been explored of coastal lifeways, of those populations that inhabit lagoons of the Caribbean coast and that circulate offshore for fishing and navigation. These coastal and marine populations, mostly Afro-descendant peoples, have developed a model of use and socio-ecological relations with the ocean, with the Greater Caribbean, which show a *maritorium* (maritime territory) that connects Colombia with Insular America (Márquez 2019).

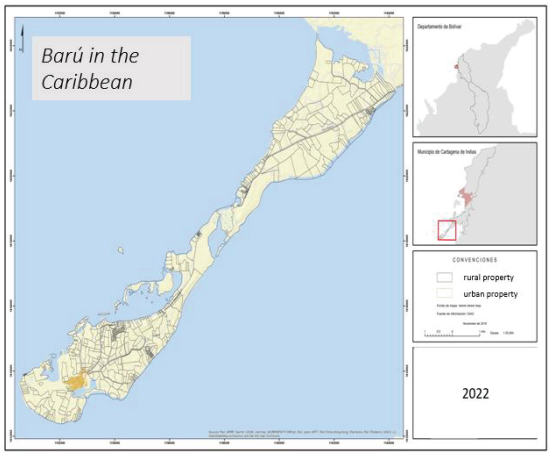
However, this close relationship between island peoples and the sea is currently facing multiple threats. On the one hand, the degradation of marine systems has led to the collapse of fisheries (Salas *et al*., 2007), and the abandonment of fishing activity and fishing gear (DFG - Derelict fishing gear) contributes to the major problem of marine debris (Macfadyen, Huntington and Cappell, 2009). On the other hand, the ways of life of coastal peoples have had to maneuver through abrupt changes in the ecosystem and with a scenario of new actors and uses of the sea such as tourism, the real estate boom on the coast (Berkes, 2015), the creation of protected areas, the construction of ports and other uses of the sea that affect them in the free circulation and access to the already scarce fishing resources and, as a whole, their own community's way of life.

The problem is not easy to deal with. Given the decline of fish stocks, it is clear that the ecosystem has degraded and that, although artisanal fishing is a sustainable practice, it must adapt to the new ecological realities and social contexts. It is not only in the Caribbean that the marine fishing industry is out of control, catch projection models indicate that, given current fishing practices, fish stocks will completely collapse by 2050 (Golden *et al*., 2016). Likewise, private use of the coasts is also a recurrent problem that reconfigures governance structures over local peoples who do not have legal security of land tenure or recognition of areas of preferential use of the ecosystem (Bolaños *et al*., 2020). Some of the most important scientific debates on the Caribbean were reflected in the January 2015 Resolution of the United Nations General Assembly that recognizes the Caribbean Sea as an area of unique biodiversity and a highly fragile ecosystem that requires

joint efforts for the formulation and implementation of regional initiatives aimed at promoting the sustainable conservation and management of coastal and marine resources[a].

Barú is a peninsula of Cartagena de Indias in Colombia separated from the mainland by the Canal del Dique which was built in various periods from 1575. From the categories of legal and administrative order of the State, Barú is considered an island system. It is characterized by being populated mostly by Afro-descendant communities of former *palenques* and *arrochelas*[b] that have built livelihoods based on fishing, navigation, agriculture and, more recently, tourism. Since the 1980s, several conflicts have taken place in Barú between native populations and other private and state actors. Almost all of the disputes are related to the use, distribution, control and access to environmental goods and services in the continental area and in the extensive marine space that constitutes the territoriality of the *baruleros* (See map 1).




**Map 1**: Location of Barú in the Caribbean

From the political-administrative perspective, these types of places have a diffuse treatment in the territorial planning of the city: they are not urban enough to be considered open areas of expansion of the city, but neither are they from the perspective of planners, considered to be a rural area with characteristics that exclude it from the real estate market. Paradoxically, it is also in the immediate context of the Corales del Rosario National Natural Park, which today has 120,000 hectares declared under this figure of protection and is part of the most extensive coral platform of the Colombian continental Caribbean.

As in other parts of the Caribbean, given the ecological fragility of the coasts, Colombia has been designing sustainability policies, the most important of which has been the creation of marine protected areas and the delimitation of navigation lines for the preservation of coral and seagrass ecosystems. However, many of these so-called "sustainable policies" have negatively affected the local populations that inhabit the sea and today face regulations that tend to exclude them from fishing and navigation. Thus, in recent years the Caribbean has been facing a moment of transition: from the sea as an infinite space and territorial reserve of the State, to the sea as a natural resource available to be encapsulated in the discourses of sustainability. On the other hand, the claim for an inhabited sea, a populated sea, gives shape to a narrative that places the peoples of the sea at the center, Colombia's historical relationship with the Greater Caribbean and the search for recognition of the sea as a space of encounter, identity, and roots. Given all this, it is worth asking what model of sustainability has been implemented in the region under study, what concepts underpin it and what is its praxis and true scope; since, clearly, it is a model that does not include the local population or give rise to their territorial claims over the coasts and the sea, which is contradictory in a State such as Colombia's, which has recognized special rights to Afro-descendant communities since the 1991 Constitution.

For a complex reading of this reality that demands it, we start from an intercultural perspective to address the issue in order to enable the recognition of the conflicts that cross the relations between the Barú community, the private sector and the Colombian State. An intercultural perspective is understood as one that enables the recognition of asymmetries between communities and their respective ways of life, and allows the understanding and reconstruction of fair and sustainable relationships (Senent-De Frutos, 2020). Consequently, sustainability here is a dense concept in an integral sense, which systematically includes a complex of dimensions such as ethical correctness in the relationship between communities, objectifiable in the absence of violence and the recognition of the legal capacity of others (intercultural dimension), and which also includes the capacity for social reproduction and the way of life (social and cultural dimension), as well as

[a] Resolution adopted on December 19, 2014. Available at: www.un.org/es/ga/67/resolutions.shtml

[b] Categories used during enslavement to name the spaces of freedom that made up the people who fled from their enslavers.

its adequate relationship with the natural environment, in that it allows the ecological continuity of the natural system where it interacts (ecological dimension).

In summary, the insular system analyzed shows the transition of the coasts and the sea from a common good of local communities to a mixture of private or state-controlled goods, which are inserted in coastal management models presented by the state, allegedly, as sustainable and inclusive models (Said *et al*., 2019). Therefore, based on data on the degradation of the natural and social systems of the region, we want to problematize the notion of sustainability that underlies national maritime management policies and that accentuate patterns of regulation over the sea tending to scenarios of exclusion of artisanal fishing communities. An already problematic context that is aggravated, in turn, by the negative impacts of climate variability, with the devastating effects of commercial-industrial fishing and ocean pollution (Douglassa & Cooperc, 2019).

## 2. BACKGROUND AND KEY CONCEPTS

In the Colombian Caribbean, there are communal lands and other common goods such as low tide areas and the ocean itself; areas about which a series of geographic, environmental, legal, and economic studies coincide in pointing out that they are characterized by a richness in the functionality of their ecosystems and for being ancestral spaces of ethnic groups, mostly Afro-descendant populations (Durán, 2007). However, the studies consulted consider that, one of the main problems has been the privatization of spaces for community use and the degradation of the resources that sustain native populations, particularly in access to water (Camargo & Camacho, 2019; Centro Nacional de Memoria Histórica, 2017; Herrera *et al*. 2021). In summary, the irruption of private use over collective territories is an important axis of discussion in the study of the sustainability of RUCs.

This problem can be read from the perspective of environmental justice and ecological-distributive conflicts, since it involves a set of common goods in which different actors with differentiated power relations dispute access and regulation (Göbel *et al*., 2014). This conflict can be explained, among other factors, by the mercantilist valuation of nature that leads to regimes of invisibility of ecosystems and of those who inhabit them, as imaginaries and ways of life are imposed that are reduced to economistic rationality (Senent-De Frutos, 2010).

Thus, the theoretical debate on the effective management of the RUC and its sustainability goes through several areas. On the one hand, the increase in the institutionalization of the State through the promotion of centralized rules that strip local communities of their legal capacity and, on the other, the privatization of the commons (Hardin, 1968). In contrast to the dichotomy of public and private, the idea of protecting collective management systems through local regulatory arrangements has emerged as a strategy for resource conservation (Agrawal, 1994; Ostrom, 1990). Privatization of environmental goods and services is also associated with enclosures, exclusion, and commodification of ecosystems (Brockington and Duffy 2011; Castree, 2008). In turn, the privatization of lands and ecosystems for the implementation of projects that benefit particular groups translates into inequality (Bromley, 1992).

This discussion transferred to marine ecosystems has several challenges. On the one hand, private property does not exist in the seas, nor is it common for legal regimes on land tenure to apply to marine ecosystems. On the other hand, marine ecosystems are usually protected by state-controlled regulations, in the case of the Colombian Caribbean, regulations exercised by environmental authorities and the military forces. However, coastal management does allow for tenure modalities that combine private property and state control, as will be shown below, with the difficulty that the limits of coastal ecosystems are not simple, but complex and ever-changing (Costanza *et al*., 1998).

Discussions such as this are part of the challenges of ocean sustainability in the context of the Decade of the Oceans declared by the United Nations for the period 2021 - 2030. This is aimed at "a revolution in ocean science that will trigger a change in humanity's relationship with the ocean" (IOC-UNESCO, 2020), as well as offering the ocean community an opportunity to join efforts, mobilize resources, build partnerships, and engage governments to advance what the Decade summarizes as "the science we need for the ocean we want". The results remain to be seen, but it is undeniable that there is a framework of opportunity to articulate all the actors interested in the seas, improve knowledge, and imbue the field of ocean sustainability with an adequate praxis of the rights of peoples to the sea.

Precisely for this reason, addressing tourism in all its socio-economic and ecological implications is essential to understand the problems of coastal privatization. Not all tourism models put pressure on the local population, but in the Caribbean, a region where countries with high dependence on this activity for their economies are located, practices of dispossession, pressure, and representation of the Caribbean as an uninhabited beach have been identified (Devine & Ojeda 2017).

From the environmental dimension, coastal ecosystems, such as estuaries, seagrasses, and mangroves, tend to have a high value in terms of both economic and social value (Berkey, 2015). Now, from a socio-ecological perspective, the two subsystems are linked by mutual feedback and are considered interdependent

and co-evolving (Berkes 2011), thus it must be considered that, despite degradation and exclusion, oceans and coasts continue to satisfy human needs physically (food), ecologically (biodiversity), economically (livelihoods) and culturally (sense of place). Precisely because of this co-evolution, an alteration in the social system will always affect the ecological system and vice versa, so that the set of conflicts over common goods is expressed in all dimensions of interest for sustainability: social, cultural, and ecological.

Conceptually, local communities must be considered as collective subjects, they are not simply rural dwellers, their way of life, their historicity, local ecological knowledge, and projection of present and future, in short, their capacity for cultural self-determination, must be valued. Therefore, it must be considered that their form of social organization is the source of their own law and, as legal theory today recognizes (Wolkmer, 2018), in the context analyzed here as well as in other contexts of Latin America and the Caribbean, we are faced with a situation of legal pluralism, because in addition to state regulation, we find in the customary practices of the peoples a sense of justice that originates its own system of juridical process that can be articulated, or in its case, collide with other formal normative systems of the States insofar as they are not respectful of the capacity for juridical self-determination of the local communities (Senent-De Frutos, 2010). In the case of Barú, as will be seen in the results, the relationship of their ancestors and reborn with the sea acquires a legal value that has been established by the community itself in its organizational and authority logics. Although the State does not explicitly recognize a right to the sea, the communities themselves, by virtue of the self-determination exercised customarily, establish their notions of territory and territoriality without excluding marine life. This has been named as maritorium concept that aims to show the complex ways of life that the sea makes possible, the systems of use of local communities that are in connection with the tides and all the hydrobiological resources it provides, who live on/with it in their boats that are an extension of their homes (Álvarez *et al* 2019).

## 3. METHODOLOGY

The methodological strategy combined spatial analysis of coverages, analysis of cadastral mapping for tenure status and structures, focus group guided fieldwork, semi-structured interviews, and questionnaires (Young *et al*., 2018). All interviewees were fully informed about the scope and main objective of the research, as well as the subsequent use of the collected information and dissemination. Prior to conducting the interviews and focus groups, voluntary and informed consent was requested, and the anonymity and privacy of the interviewees was guaranteed. In the community of Barú there are currently about 250 fishermen, all men. From this universe, fieldwork was conducted with 142 fishermen and other members of the community who are authorities of the community council[c]. Subsequently, the field guides were transcribed, coded, and processed through Partial Least Squares software (PLS-SEM) which is a combination of interdependence and dependence techniques to explain the relationships between multiple variables simultaneously (Hair *et al*., 2017). From the spatial analysis, this region emerges as a diverse coastal landscape, with ecosystems of high conservation value such as mangroves and tropical dry forest increasingly vulnerable due to tenure and use conflicts that were documented in the research from satellite images of the years 1987, 2004 and 2017 available for processing and analysis through ArcGis software to contrast with other land cover research developed in the region (Arrieta, 2019; Bolaños *et al*., 2020).

The national courts and the Inter-American Court have barely pronounced on this issue of the right to the sea, but there are some precedents of how it has been treated. On the one hand, the Constitutional Court of Colombia pointed out in Ruling T-606 of 2015 that the degradation of ecosystems cannot be reduced to an ecological problem because the interdependence of fishermen with maritime ecosystems is so close that any disturbance can trigger a social and economic problem for artisanal fishermen. The Court, in this case, was analyzing the prohibition exercised by a protected area on the fishermen of a Caribbean population. On the other hand, the Inter-American System has had several cases that set important precedents, but most of them focused on the labor protection of fishermen, such as the case of the Miskito divers vs Honduras. However, following a consultation made by the Colombian state, the Court ruled on how to interpret the Pact of San José when there is a risk that the construction of infrastructure works seriously affects the marine environment in the Wider Caribbean Region and, thus, the human habitat essential for the full enjoyment and exercise of the rights of the inhabitants of the coasts and islands (Advisory Opinion OC-23/17). In this case, the Court made an important conceptualization of the protection of the environment and the effective enjoyment of other human rights considering the interdependence and indivisibility between human rights, the environment and sustainable development.

## 4. RESULTS

[c] Figure of legal organization that Afro-Colombian communities have by virtue of Law 70 of 1993. It is the highest authority within the territory according to said Law and the governance structures adopted by each collective.

The challenges for marine-coastal sustainability that the case of Barú illustrates will be presented with emphasis on the different dimensions, intercultural, social, cultural and ecological.

Faced with the imminent loss of emerged land and marine area, the community of Barú requested in 2017 to the Colombian State to be awarded as collective land about 2400 hectares, at the same time they requested to recognize the coasts and the sea area of preferential use. To this end, they made an inventory of the main fishing areas and made an estimation of at least a 19,000-mile area of maritime use for navigation routes, links with neighboring peoples and, in general, for the sustenance of their ways of life. After many legal and social tensions, the Colombian State still has not responded in substance to the community's request, which is inexplicable given that this is a community that has been present in the territory for more than 300 years, and even has a title deed for the lands it occupies, acquired in common and proindiviso through the public deed of 1851, the year in which slavery was abolished. The State claims that this deed is no longer in force and that today, the entire island has owners who are mostly people outside the community (Observatorio de Territorios Étnicos, 2020).

Beyond the legal dispute over land tenure, it is clear that there is a confrontation between various models of land use and the commons. Changes in land use that began in the 1960s and have become more acute since the 2000s (supported by changes in land use in the Cartagena Land Use Plan) have boosted real estate investment in Barú, mainly for the construction of hotels and recreational homes, which has generated pressures and incentives for the sale of land by the native inhabitants. But it was at the end of the 1980s, with the creation of the Corales del Rosario National Park, that the relationship of the natives with the sea began to transform (Durán, 2007). In the data collected in the field, it was determined that the main spaces of community use that have been affected by the privatization of use and/or property are the beaches, mangroves, and navigation lines near the coast.

The recognition of collective property for the native community, in addition to being the vindication of a property title from 1851, in which the community represented by 5 people acquired 7 *caballerías*[d] collectively, is also an opportunity to direct community efforts towards strengthening their own vision of development, which respects their practices as an ethnic people, favors local economies, and promotes autonomy and self-governance.

The insecurity of collective tenure threatens the cultural survival of these people, as well as their ability to resist expulsion. In addition, the ecosystems that make up the *barulero* maritory, mangrove and dry forests, coral reefs, sea grasses and some coastal lagoons also present some degree of threat, as they have been privatized and degraded, either by cutting down plant material or by changes in the flow of nutrients. The logics of natural resource use that come with private investments or with people who do not depend on them, often go against the traditional management that has been given to them. These new forms, in addition to modifying the use of soil and other resources, alter the intangible relationships between the community and nature. Part of the community's identity lies in its links with the surrounding ecosystems, and insecurity of tenure facilitates the degradation of natural spaces.

On the ecological sustainability side, the data are convincing. Table 1 shows how coastal land cover decreases in shrublands and floodable forests, while the urban fabric and recreational facilities grow. In the case of the high floodable forest, it shows a recovery in 2017 due to community reforestation processes and actions of the environmental authorities. In the marine area, the use of 98 artisanal fishing spots went from 98 to only 10 fishing areas where this activity can be practiced. That is, between 1987 and 2021 the community lost access to about 90% of the marine territory.

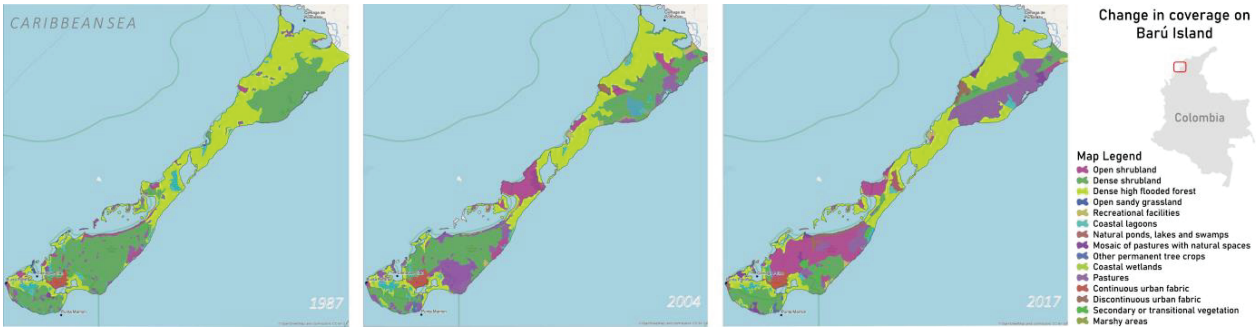
**Table 1.** Hedging analysis

| Land Cover | 1987 (Ha) | 2004 (Ha) | 2017 (Ha) |
|---|---|---|---|
| **Dense shrubland** | 1,081,833 | 851,562 | 419,169 |
| **High Dense Flooded Forest** | 1,002,868 | 765,026 | 850,652 |
| **Recreational Facilities** | | 26,069 | 31,482 |
| **Discontinuous Urban Fabric** | | 14,823 | 60,530 |

The environmental analysis used satellite images from the years 1987, 2004 and 2017 to build a multi-temporal documentation of land cover changes, evidencing the loss of natural covers such as dense shrubs (tropical dry forest) and dense high floodable forest (mangroves) and the increase of artificial covers such as recreational facilities and discontinuous urban fabric. Table 1 and map 2 show the evolution of private establishments closely related to the invasion of traditional community lands. This pattern of privatization in coastal areas has direct impacts on the community's livelihood systems, as the Barú people are essentially a fishing community, which currently has restricted access to maritime areas.

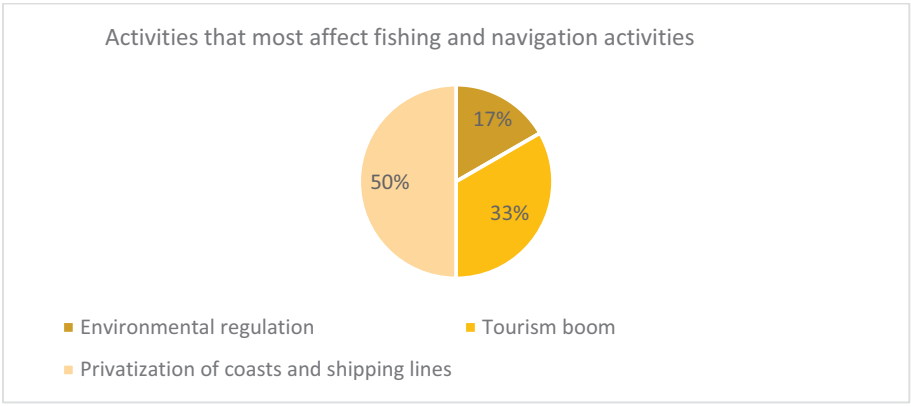
[d] One caballería in the Caribbean was equivalent to approximately 423 hectares.




**Map 2.** Multi-temporal evolution of Barú Island's coverages

According to the field work, what best explains the loss of access to the fishing resource is the combination of three things, environmental regulations, the tourism boom and the consolidation of hotels and luxury houses that have privatized the coasts and navigation lines. As shown in Table 2, the effects are diverse and the inhabitants have established a scale of importance between those with more weight in the effects that are illustrated in Graph 1. Even though in the field we inquired about the causes of climate variability, for the fishermen the main effect is caused by the privatization of the coasts, the tourism boom and environmental regulations.




**Graph 1**. Activities with the greatest impact on the fishing and navigation system

**Table 2**. Synthesis of field work on changes in fishing and navigation activity

| Explanatory factors | Environmental regulations | Tourism boom | Privatization of coasts and shipping lanes |
|---|---|---|---|
| **Effects** | The National Park Authority:<br>• Bans fishing in more than 50% of the area where they used to fish.<br>• Monitors the species caught and tends to severely sanction fishermen.<br>• Limits navigation zones and makes fishing more difficult. | • The fishermen combine the activity of fishing with that of tour guide.<br>• There is no generational replacement; the youngest fishermen are over 30 years old.<br>• A large part of the population provides services to tourists. | • Shorelines for catching bait are now closed with bollards and private property signage.<br>• Night fishing cannot be practiced without available shorelines for overnight stays or shelter from bad weather at sea.<br>• Movement during trade winds and other weather phenomena is made more difficult if the beaches are for the exclusive use of the new owners. |

The lack of formalization of the rights of communities has facilitated the advance of foreign commercial investments, in which the needs of the communities that inhabit these territories (generally ethnic groups and peasants) are made invisible or are not considered a priority. Such is the case of the expansion of the mining industry in the Pacific basin and the infrastructure of resorts and hotels in the Caribbean islands (Restrepo, 2017). In Barú, the increase in tourism infrastructure is the main driver of land privatization, coastal zone grabbing, and changes in the settlement patterns of Barú's inhabitants. The 873 private properties identified

within Baru's ancestral territory cover an area of approximately 1,321 hectares. Of the 185 private properties in the community and state properties, 122 had their titles registered and acquired through a lawsuit before a civil judge. The progressive dynamics in the land market are invading the community area located in the interior and on the edge of the island. Map 1 shows the cadastral formation of the island, and it can be seen how the community's population center is in the midst of small and medium-sized privately owned properties. Illustration 1 shows the location of Barú in the middle of an estuary and mangrove areas.

**Illustration 1.** Aerial photograph of the community of Barú, 2020

This new private and state imposed rationality on the sea generates conflicts from several perspectives. First, just as the nation's lands are not unoccupied areas, the maritory is a space inhabited by a community, a space that makes forms of life possible. Thus, in the legal sense, there is a custom of activity in the sea that, in the light of existing legal pluralism, must be considered by the State. In intercultural terms, it is not exclusive to the Colombian State to regulate the use of the sea based on notions of sovereignty. When the State establishes these regulations, there is a conflict between two legal systems that is not sufficiently recognized. On the one hand, the right of the community and on the other, the competence of the State. Second, it is an unequal conflict: The community is not recognized in its historical practices and is supplanted by state sovereignty. This generates a process of degradation, loss of identity, local culture, and alteration of the traditional way of life. And third, a problem of sustainability.

The State only proposes to create protected areas and grant concessions for the private use of beaches and coasts, but in practice this generates structural deficits: There is no respect for the traditional rights of the community or consent to change the regulation of their own space as required by ILO Convention 169 ratified by Colombia in Law 21 of 1991. In this scenario of State intervention, neither social nor cultural sustainability is possible. This results in a violent monocultural reduction due to the State's alleged monopoly that imposes what is culturally relevant and admissible, in other words, the State confers on itself the right to say who has rights over the sea.

It is worth reflecting on the role of the State in ecological sustainability, since its role has not only been to establish protected areas, it has also allowed and co-created a real estate, hotel and tourism model that has repercussions on the ecological crisis. It has facilitated that the rationality of the individual is installed in maritime areas through figures such as licenses of use or concessions. Therefore, the State's activity is not only protective, but protects some areas and privileges some actors, while degrading other areas and excluding local populations from their right to participation and consent.

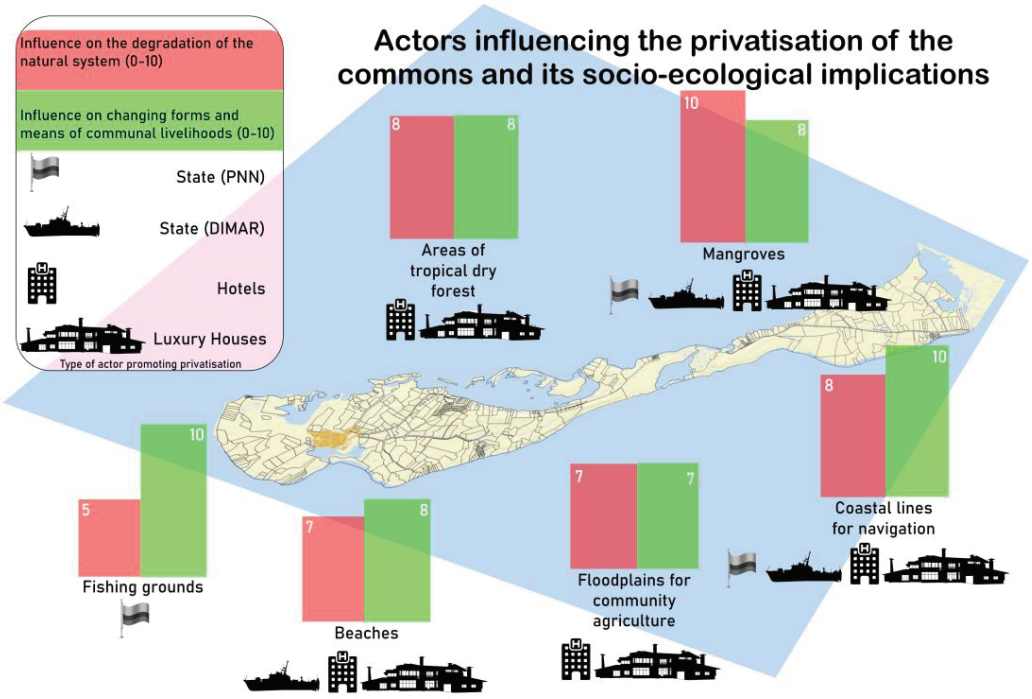
Thus, the insecurity of collective tenure threatens the cultural durability of the Barú people and their ability to resist the progressive eviction from their ancestral territory. Natural resource management systems that come from private investments or from people who do not depend on these resources, often go against the traditional and sustainable management given by the community. These new management systems negatively affect not only traditional land use patterns, but also the intangible relationships between the community and nature. Part of the Barú community's identity stems from its ties to ecosystems. As the local community affirms, and as can be seen in the historiography of the region (Múnera 2012), the history of Barú cannot be narrated without its relationship with the sea. Its people are recognized in the Greater Caribbean for their expert knowledge of navigation (Márquez 2019).

The actors that the local community finds to have more weight are the State authorities, represented in the maritime authority through its general directorate (DIMAR) and the environmental authority that makes presence in the territory through the office of National Natural Parks (PNN). Additionally, actors such as hotel owners and private homeowners of non-native families also exert an influence on the privatization practices described above. Figure 2 summarizes these interactions using as units of analysis: the beaches, fishing flats, navigation lines, mangrove swamps, community agricultural floodplains and tropical dry forest areas. Just to illustrate some of these impacts perceived by fishermen, Table 3 shows a synthesis of the impacts on beaches.

**Table 3**. Synthesis of focus groups with fishermen

| Spaces affected by privatization | Type of actor promoting privatization | Main changes perceived in the natural system | Main changes perceived in livelihoods and ways of life |
|---|---|---|---|
| **Beaches** | - Hotel sector<br>- Construction of rest homes or second homes<br>- State authorities (environmental sector PNN)<br>- State authorities (defense sector) _ DIMAR (beach concessions)<br>Mayor's Office of Cartagena | Rocky beaches have been transformed into white sandy beaches by the removal of corals and sea grasses. Although landscaped as a resting place for tourists, most of them are artificial beaches that have been built by removing the seabed and, consequently, destroying the habitat of various species. This increases the vulnerability to erosion, flooding, risk of hurricanes, and the risk of flooding. | The beaches for the community have been a place for recreation, cultural recreation, work and, mainly, have been very important for fishermen and collectors. When the beach becomes private, the community loses access, land and water circulation on the concessioned beach to natural or legal persons external to the local community. |




**Graph 2**. Actors influencing the privatization of the commons and socioecological implications
DIMAR (Dirección General Marítima (Spanish acronym) - Colombian Maritime Authority) / PNN (Parques Nacionales Naturales (Spanish acronym) - National Natural Parks - State)

## 5. CONCLUSIONS

Fishermen in Barú numbered about 1,500 people in the 1980s according to scattered local censuses and reports from the Mayor's Office of Cartagena. The sea is no longer the same as before in terms of biological productivity, nor is it a space managed by local communities. As shown, the influence of environmental, navigation and tourism policies have significantly transformed the local management structures and, with this, have put into operation a governance model that the native inhabitants do not fully understand. However, these communities have adapted to a changing and degraded natural system, have moved from fishing to the sale of tourist services, but are committed to reclaiming fishing and navigation as a collective practice and identity that connects them with their Afro-descendant heritage.

In all of this, the proposals of the Wider Caribbean states to make the activities that take place in the sea more sustainable have emerged, but the rights of the native communities do not appear forcefully in the sustainability equation implemented. For this reason, the intercultural approach emerges as an essential element in the revision of policies for the creation of protected areas, tourism policies and economic models that involve the sea and its inhabitants. The maritime management that has been implemented has simplified

the human presence on the coasts and has ignored the ethnicity and vulnerability of the ways of life that occur there. In the case of Barú, it can be seen how the creation of protected areas has not meant the preservation of the ecosystem, but rather, similar to other conservation cases, has tended to limit local management practices and the communities' knowledge of the ecosystem.

On the contrary, both on the coast and in the sea, disturbances such as deforestation, removal of pastures, construction of artificial beaches and the drying of coastal lagoons among others, have accumulated. This becomes more complex if such sustainability models do not take into account the intercultural, social, and ecological dimensions, but rather tend to impose natural resource management logics that deepen injustice in each of these dimensions. The sustainability of these types of ecosystems, in landscapes inhabited by impoverished local communities racialized by state and private power logics, cannot be achieved without a focus on socio-environmental and intercultural justice.

The construction of a new theory and praxis of sustainability requires a clarification of definitions and concepts, while at the same time generating processes for society to feel the sea as an essential part of its life and to critically reason about its privatization. In this case of the Caribbean, as stated by Berkes (2015), common goods are usually in the hands of a combination of property, use, tenure rights regimes that combine private, public and community, and this challenges management scenarios, mainly if we are dealing with unmeasurable spaces such as the sea. In all of this, local and traditional knowledge provides a practical way of understanding the state of resources and environmental change, but the recognition of collective rights to land and sea will generate a true horizon of inclusion and sustainability for peoples who aspire to continue to inhabit the sea, such as the people of Barú.

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