

# ENVIRONMENTAL JUSTICE, LATENT AND MANIFEST CONFLICTS: A CASE STUDY OF THE ARTISANAL FISHERMEN IN THE NORTHERN REGION OF THE STATE OF RIO DE JANEIRO

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## Introduction

Environmental justice may be an important concept when thinking about existing and potential social relations, either as utopias or as real situations. Environmental justice refers to the opportunity of exercising the right to make decisions on the use of the environment, via environmental policies such as the distribution of environmental costs of social or economic ventures, in accordance with the equity principle (Herculano, 2002). In contrast, the term ‘environmental injustice’ is used to refer to inequality in relation to the environmental damages caused by economic growth (Ferreira, 2011).

Martinez-Alier (1997) uses the concept of ecological distribution in a similar way to refer to “*social, spatial and temporal asymmetries and the unequal use of environmental services and resources by human beings such as the exhaustion of natural resources (including the loss in biodiversity) and the impact of pollution*” (p.122).

Within the field of socio-environmental studies known as Political Ecology, environmental justice relates to conflicts involving territorial rights and cultural meanings, as defined by Zhouri *et al* (2005). He argues that

conflicts occur when the meaning and the use given to an environmental space by a particular group negatively affect the meanings and uses given by other social segments in order to ensure the reproduction of their way of life (Zhouri *et al.*, 2005, p.18).

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As conflicts unfold, the conditions and forms of social reproduction of both individuals and social groups, and indeed the power relations between different groups and social classes, are at stake. Indeed, what is at question is environmental justice. Acselrad (2004) is very clear in this regard when he defines environmental conflicts as

involving social groups with different ways of appropriating, using and giving meaning to an area, when at least one of the groups' social environment is threatened by the undesirable impacts - on land, water, air or living systems - resulting from the practices of other groups. (Acselrad, 2004, p.26).

These sorts of conflicts particularly occur in two types of situations: in the implementation of environmental preservation areas or when economic ventures have substantial environmental impacts.

With regard to the implementation of environmental preservation areas, Laskefski e Costa (2008) note the emergence of divergence between groups. They emphasize that the results of these confrontations frequently express the priorities of particular interest groups which are often in contradiction with one another. Power relations come to the fore in these situations.

Zhouri *et al.* (2005) show that large economic ventures involving environmental resources create environmental injustices which threaten and harm more vulnerable sectors of society. Furthermore, they prevent these sectors from enjoying the positive benefits of so-called development. The experience of many social movements show that people and groups who are harmed in this way are not necessarily passive (Zhouri *et al.*, 2005). For example, movements made up of people affected by the building of dams, exposure to asbestos, or rubber tappers.

Nevertheless, it is important to remember that these situations do not always foster a reaction, either in the form of movements or otherwise. Thus, we suggest classifying socio-environmental conflicts into two groups: (1) those expressed through the narratives and/or actions of the social subjects involved; and (2), those which remain latent, that is, conflicts which are not openly manifested in face of environmental injustice, contradictory interests, world visions or when the social reproduction conditions of groups produce inequality in terms of access to environmental resources.

Significantly, a group of artisanal fishermen in Lagoa de Carapebus, Municipality of Carapebus, State of Rio de Janeiro, Brazil, has been experiencing a situation of multiple conflicts, both with regard to the implementation of an environmental preservation area and as a result of economic development projects. Artisanal fishermen practice fishing on a small commercial scale and employ less predatory methods. Furthermore, they are self-employed, making use of a workforce consisting of family members or neighbors (Cardoso, 2001).

The northern region of the state of Rio de Janeiro, where Carapebus is located, has undergone drastic changes since oil was found in the Campos basin with the subsequent arrival of Petrobrás in 1974, together with four thousand other companies working in the

oil sector in the nearby city of Macaé. As we will discuss in the first part of this article, in addition to the environmental impacts which can affect the work opportunities of artisanal fishermen, the way in which development occurred in the region altered the living standards of the population in general and in particular of its poorer sectors (including the lives of workers in the fishing industry).

Furthermore, in an attempt to protect environmental areas under threat, the government promoted actions which once again impacted on the lives of the fishermen in the region. In 1998, the Restinga de Jurubatiba National Park (PARNA Jurubatiba) was established via a presidential decree. It encompasses part of the municipalities of Macaé, Quissamã and Carapebus, including part of the Carapebus Lagoon. Once the park was created, the monitoring of fishing activities increased and, through the struggle of artisanal fishermen, some were granted the right to fish - under certain restrictions regarding equipment and times - in the part of the lagoon inside the park. This will be explored in detail below. This concession was laid out in a legal instrument known as a Conduct Adjustment Agreement (TAC) between the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA) and local fishermen.

Given this scenario, this article explores the following questions: 1) Considering the profound transformations over the last three decades with regard to the living standards and working conditions of fishermen in the Lagoa de Carapebus, what are the socio-environmental conflicts they experience? 2) What are the conditions and the reasons for these conflicts to be expressed in either a latent or manifest form?

A qualitative field study, conducted between November 2011 and September 2012 was used to explore these questions. Semi-structured interviews were conducted with 11 artisanal fishermen in Lagoa de Carapebus. The study also included participant observation of formal and informal meetings between the fishermen.

First, we will discuss the conflicts which are explicitly manifested and then we will consider the situations of environmental injustice which may lead to potential conflicts. The conditions in which and the reasons why conflicts may appear in a latent or manifest form will be discussed, based on the analysis of the two distinct situations mentioned above.

## Results and Discussion

### *Manifest Conflicts*

There are four situations which repeatedly appear as sources of conflicts in the narratives of the fishermen in relation to their histories: (a) the selection of fishermen allowed to fish in the PARNA Jurubatiba Park; (b) the monitoring of fishing within the park; (c) illegal activities of fishermen during the closure period<sup>1</sup> and (d) fishing when sandbanks are opened, that is, when fishing takes place during the period in which the sandy strip separating the lagoon from the sea is broken.

In the first two cases, the fishermen's conflicts are mainly with the State - indirectly with the federal and municipal governments responsible for establishing laws and granting permissions, and directly and more visibly with the monitoring and policing officers.

These conflicts involve other fishing colleagues to a much lesser extent and only when there is divergence with regard to the regulations. However, when the closure period and sandbank opening occur, the main conflicts are between the fishermen themselves, although these are intertwined with relations with the government authorities. The State's power is particularly apparent in the narratives of fishermen, expressed as a monitoring and punitive force perpetrated against those who act outside legal rules.

The implementation of the park brought these conflicts to the fore, resulting in an increase in monitoring. The fishermen's response was to organize themselves and learn about issues related to their working conditions (such as the fishing closures), so as to play a more knowledgeable part in the confrontations regarding the new directions taken in the management of Lagoa de Jurubatiba.

The PARNA Jurubatiba Park was established in 1998 in order to contain the environmental degradation caused by the occupation of *restinga* (sandbank vegetation) areas by urban communities, smallholders and farmers who set up embankments and artificial barriers for water drainage, in addition to carrying out activities such as cattle-raising and coconut and pineapple cultivation (Vainer, 2010). According to Esteves (2011) the mobilization for creating a park started in the mid-1980s. It was an initiative of researchers linked to universities which received the support of environmentalists belonging to local non-governmental organizations, as well as some directors of IBAMA.

There were intense conflicts regarding its creation and implementation. On the one hand, it involved university researchers, members of NGOs and IBAMA officials who were in favor of the park's creation, and on the other, a few local residents, alongside farmers and smallholders who raised cattle and cultivated coconut in the area, supported by local councilors and mayors (Esteves, 2011).

When the park was created at the end of the 1990s, the experience of implementing conservation units in Brazil was in contraposition to the 1960s American model in which preservation areas could not have any residents or allow people to use the area's resources. This model, which sees nature as untouchable and was criticized by Diegues (1998), among others, had caused a number of social conflicts with the expelled or surrounding populations. These confrontations increased during the 1970s, including in Latin America. During the last decades of the 20th century, it was observed that management actions associated to the way of life of traditional communities, including artisanal fishermen, was capable of contributing to the preservation of biodiversity (Diegues, 2000).

Traditional populations are

human groups which are culturally distinctive and whose ways of life have been historically reproduced, to some degree in isolation, based on social cooperative methods and specific ways of relating to nature. They are usually characterized by the sustainable management of the environment (Diegues, 2000, p.23).

In a number of parks established during this period the so-called traditional communities were allowed to use the park's natural resources. However, this did not

necessarily mean that they were responsible or involved in the processes of implementing these conservation units.

Paradoxically, in the case of PARNA Jurubatiba, the fishermen were not consulted when the park was being created. However, once the park was established, and because of its impact, they became an active voice in relation to the park's rules and procedures. This was due to an increase in the monitoring of fishing activities within the park which resulted in the need for registration, and ultimately led the fishermen to organize themselves to fight for their right to fish within the conservation unit, as can be observed from their statements below<sup>ii</sup>:

Monitoring became more severe once the park was created, because now there's the Environmental Guards, there's the Forestry Guards and the Federal Police. They monitor as well. We have the service that is responsible for the park and we have the Environmental Guard. At the moment they are not allowed to arrest you. They have the power to monitor, they can call and bring in the Military or the Federal Police. And with the Federal Police, it's the same old story: when they come, they don't come to monitor, they come to arrest you. (Fisherman E)

There wasn't one [fishermen association in Carapebus before 1998]. There were only 10 registered fishermen, you see? And when we founded the Association, we went there, we made the fishermen aware that they had to register (...). I got this thing about the association in my head because the police had taken my fishing equipment, by force. When I went to get it from the police station, I [was] treated like I was worthless by the police, because I could not prove I was a fisherman. So I started knocking door to door - I know everyone around here - to set up the association and register everyone. (Fisherman G)

Four of the eleven fishermen interviewed spontaneously complained that they had not been consulted during the discussions on the creation of PARNA Jurubatiba. But what seemed to really tip the balance was the sense of injustice for being treated without the dignity their profession should have granted them.

What changed for me after the Park was this: what benefit does it bring us? [it was positive] in terms of our role as those who know what is right and what is wrong. We were never informed, as you've heard: "fishing was lost during the closure period". But we did not know what a fishing closure was. The right to the closure, which we should have had, that all legal fishermen should have, the right to have health insurance when a fisherman is legal. A fisherman, he has the right to a loan to buy his boat or net or his fishing equipment. All this benefitted the fishermen. We learnt all this through the park. So, it's a benefit that comes from the park (...). Nowadays, with the park, the fishermen are heard. Before, people did not listen to us. We were

treated like criminals. The monitoring officers would turn up, put a weapon in our faces and ask for our documents. They demanded: "Your fishing documents, where are they?" Where is the weapon? They didn't even ask for the documents first. But the first thing they asked for was the weapons. The thing is, as citizens we want to be respected, we are workers. (Fisherman G)

The statement above suggests that, in practice, the creation of the association embodies the fishermen's demand to be heard. Having a voice is a pre-requisite for ensuring they can enjoy the dignity they demand. It is part of the subjective construction of beings as active subjects when defining the rules that affect them.

Their demand can be understood as a search for recognition, according to Honneth (2003). He argues that the reproduction of social life takes place under the rules of reciprocal recognition and when this phenomenon moves beyond love and friendship, it can take two forms: legal recognition - as an individual with universal rights - or it can relate to mutual approval or social appreciation which allows subjects to refer positively to their actual skills and characteristics.

A denial of recognition threatens the identity that people construct for themselves. Given the importance of recognition and the power of surrounding expectations, this denial can be experienced as disrespect or an offense. When other subjects shatter the expectations of recognition, non-recognized individuals can feel moral indignation. Thus, the experience of disrespect, depending on the discerning abilities of the people involved and their surrounding political and cultural environment, may become the motivational impulse for struggles for recognition (Honneth, 2003).

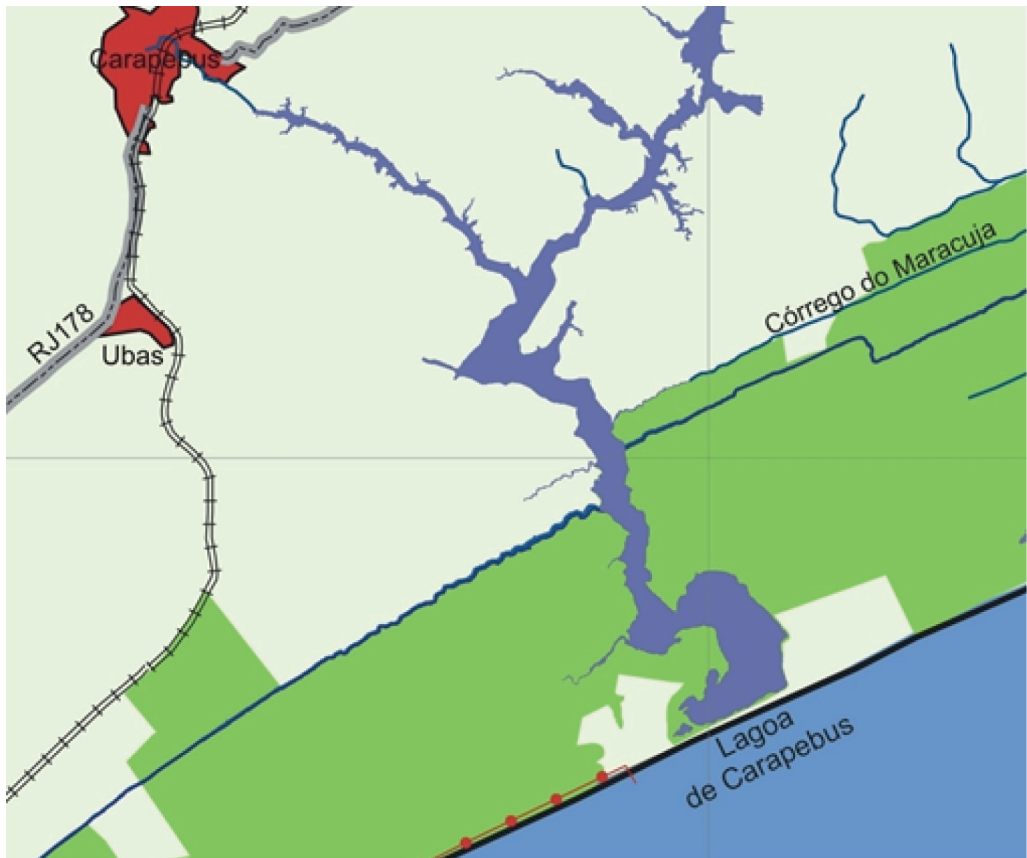
In this case study, the fishermen wanted to be recognized as workers, as opposed to "criminals" or as having "no value". In face of the State's agents of repression and monitoring, whose activities resulted in a denial of their recognition, the fishermen felt disrespected and motivated to organize themselves collectively so as to participate in the conflict at hand.

From another point of view, in addition to the subjective issue of recognition, the associative action of the fishermen is a struggle with very objective purposes, that is, to have the right to fish within the PARNA Jurubatiba Park.

Fishing comes into conflict with the *a priori* objectives and regulations of National Parks. However, a ban can harm workers and their families for whom this activity is part of their survival strategy (Santos, 2008). In an attempt to resolve this issue, without harming these families, the law on the National System of Conservation Units (SNUC) sets out the possibility of authorizing fishing in the conservation units by means of a formal pledge. This was the case in the Lago de Pirituba/AP Ecological Reserve and in the Cabo Orange National Park, where permission was granted by IBAMA and, more recently, by the management of the Chico Mendes Biodiversity Conservation Institute (ICMBio)<sup>3</sup> (Santos, 2008). This has also been the solution employed with the fisherman working in part of Lagoa de Carapebus, within the PARNA Jurubatiba. This achievement was the fruit of the fishermen's struggles in alliance with the Park's management under ICM-Bio.

These fishermen who are fishing there, they fought, because we fought a lot [to be able to fish in PARNA Jurubatiba], the public prosecutor's office granted us permission. The federal public prosecutor came here, you see? The public prosecutor's office. They found a breach in the law, they used it and they received the assistance of this young man [the Park's deputy director], he helped them. Otherwise, it would not have happened. There wouldn't be anybody fishing there. (Fisherman B)

Figure 1: Location of Lagoa de Carapebus in relation to PARNA Jurubatiba



Source: Santos (2008).

According to the Carapebus Fishing Association, 25 out of 73 registered fishermen were granted permission by the Ministry of the Environment to fish in the park. They were able to prove that they had a history of fishing in the park, that the lagoon makes up a significant part of their income and that they earn a maximum of two minimum salaries per month. This rule divides the fishermen into those who can and cannot fish

in the park. This criteria and the way of dealing with regulations sometimes leads to a sense of unfairness, which is directed towards the State and opens up the possibility of conflict among the fishermen themselves.

Nowadays, since the Park was created in 98, it is an environmental area, for preservation. Because, when it was created things changed. It benefitted the fishermen, some, those benefitted, they fish inside, because they have received a letter of authorization, and in this authorization letter there is a responsibility pledge. He can only fish in there from four in the afternoon to eight in the morning. Then from eight in the morning, if he is caught, he may be fined and the fine is between R\$500 and R\$1,800. The fine is R\$1,800 if they catch anyone with no permit with fishing and netting equipment, anyone who is caught in there. Fishing, hunting, everything is banned. So then, what happens? So I got hold of, when the Park was created, we are 25 [fishermen permitted to fish inside the park] today, there are another 8 people we are trying to see if they fall within the rules, so that they can still fish here. But, may be they fall outside, because if they have more income than is allowed, they will not fit within the rules. (Fisherman G)

From the canal to that point, it belongs to the park; this way, it is no longer the park, it is outside. From that boundary onward, only those permitted by IBAMA are allowed to fish. That is, this is wrong, it's what I had already said there: if the law protects you, it must protect me too. It does not matter if you have money or you are poor. The law protecting you has to protect me. Let's suppose I am rich, you are poor. But the same law affecting me affects you. This is what I am fighting with them about. [They did not grant me a permit] because I have a higher salary. The social worker came to my house, he did an assessment, in my house and in others. (...) But when these people from outside come, they get to the beach, they put their motor boat in the water, they do everything and they have no permit. (Fisherman B)

There are also conflicts between the fishermen who respect the fishing ban during the closure period when the sandbank is open and those who do not.

With regard to the fishing closure, there were opposing positions: it could be seen as a benefit - by preserving fish which could subsequently be caught under better conditions and/or because of the income received from the government during this period. In fact, this was one of the rights fishermen discovered once the park was created, according to the president of the Carapebus Fishermen Association. On the other hand, some fishermen considered the closure a hindrance which prevented them from working.

There were similar divergences with regard to the opening of the sandbanks, both among the fishermen and among other subjects involved, such as the residents and traders established near the lagoon, researchers and the municipality staff. According to Santos



(2006), in the past, the artificial opening of the sandbanks in coastal lagoons was conducted by fishermen at intervals of between one or two years so that marine species entered the lagoon to reproduce, increasing stocks. Santos (2008) also highlights the arguments put forward by Esteves (1998) that opening the sandbanks contributes to the improvement of water quality and a reduction of flooding which affects the houses built on the banks of the lagoons. Furthermore, it helps to reduce the amount of algae which hinders fishing activities. However, Santos reminds us that a number of researchers stress the negative environmental impacts caused by constant sandbank opening episodes, amongst which are

the high mortality and migration of freshwater species, forest fires in the vegetation on the banks of the lagoon and its canals, rapid changes in the physico-chemical characteristics of the water which change the composition of species and, if there is a period of little rainfall there is a risk of reducing the water level of the lagoon for long periods of time, resulting in a higher concentration of pollutants (Santos, 2008, p.30).

Santos *et al.* describe the conflicts among the Jurubatiba Park management, fishermen and the resident communities in the resorts in relation to the opening of the sandbanks.

Not all the fishermen interviewed had a fixed opinion on the opening of the sandbanks. Out of the seven fishermen who mentioned the subject, some argued against, basing themselves on previous experiences of fish dying, whilst others argued in favor, pointing to the need to avoid the flooding of houses in the area.

In addition, fishermen were also divided on the issue of fishing bans, that is, some respected the ban when the sandbanks were open, or during the closure periods, whilst others did not.

There was a month in which the sandbanks remained open. Everyone was fishing. How are we to have fish in this lagoon? And also, when people come here, they come to fish. People come from Carapebus, from Macaé, they stay on the other side, the others stay here. But when IBAMA arrived, they caught everyone who was fishing there. Things calmed down, and then some people arrived in cars, they started to fish. When that guy [policeman] got into the motor boat, when it started towards them, they began to run, they ran a lot, but they ran toward the forest. They managed to get into the forest, I don't know what they got up to, but it was mayhem. I thought it was wrong. Look, the police gave the order: fishing is not allowed during the closure. Why don't people obey? Fishing is not allowed, so no one should do it, let's not fish. (...) If they say there's a guy fishing, you have to go there and stop him, I take the guards there. (...) But in relation to fishing, I'll tell you: I think that this year, if the sandbanks are opened, my sons, and anyone else who is strong enough to resist, there must be guards around so that they don't allow people to fish, there

must be inspections so that people don't fish. So let him [the guard] see, let him come here in a canoe. Because whenever the sandbanks are opened, there is dragging with the nets, big, 200 meters, around two, three thousand kilos of fish were killed, kilos and kilos, sea bass, mojarra and mullet. After the dragnet, people would fish, and they would kill fish all year round, because this lagoon is very rich. This lagoon is very rich, it's really good. All that is lacking is vision, there's a lack of care. (Fisherman A)

According to Ostrom (1998), the disregard for the fishing ban during both the closure and the opening of the sandbanks periods can be seen as a difficulty in turning reciprocity into an internalized moral norm, characterized by a willingness to cooperate. However, given that reciprocity requires sanctions in cases of non-cooperation, the fact that part of the community of users of natural resources shows indignation and seeks to punish wrong-doers can be interpreted as a step towards building reciprocity (Sabourin, 2010).

All the conflicts described here are explicitly manifested. They reveal divergences in positions and contradictory interests which are externalized in the narratives and/or actions of fishermen.

Furthermore, this research also reveals the presence of latent conflicts. In these cases, conflicts of interest emerge from situations of environmental injustice. However, these are not clear in the minds of the subjects involved, or at least they are not manifested through words or actions. These are the types of conflicts discussed below.

### *Environmental injustice and the reproduction of living standards and working conditions*

The economic model adopted in the northern coast region of Rio de Janeiro state, based on oil extraction, doubly affects the region's fishermen. In direct terms, the oil industry has a number of environmental impacts which may affect the fishermen, for example, it generates noise which can drive animals away and there are risks of explosions, oils leakages and other phenomena which can harm the fauna (Silva *et al.*, 2008).

Furthermore, the arrival of the oil industry in a region where, previously, fishing and agricultural activities predominated resulted in a drastic increase in the population. Given that this growth occurred without the accompanying urban infrastructure, there were negative consequences for the whole population in the region. One was an increase in environmental degradation, linked to actions such as discharging domestic and industrial sewage into water, draining lagoons and marshes, as well as burning aquatic vegetation (Esteves, 2011), all of these threatening a number of ecosystems (Vainer, 2007). Furthermore, there was an increase in the number of favelas [slums] and illegal occupations and a rise in social inequality (Pizzol, 2008). In addition, urban services such as electricity, paving, public transport and basic sanitation are limited and inadequate (Silva Neto, 2007).

Artisanal fishermen are particularly affected by these factors, given that they constitute one of the poorest sectors of society and therefore are less capable of avoiding a drop in their living standards through private financial resources, as sectors of the

upper echelons of society are able to. For example, wealthier individuals seek areas with better infrastructure, buy mineral water to drink and pay higher prices for organic food. In addition, there is a negative impact on the income of these fishermen due to the fact that their work is directly dependent on natural resources.

For all eleven fishermen interviewed, there was a drop in the quantity of fish and seafood in the lagoon during the last 30 to 50 years. A fisherman working in the lagoon for over thirty years said:

Our lagoon is finished. They put on airs when they say “Lagoa de Carapebus” ... it’s all rubbish! Our lagoon is finished. Because in the lagoon, there is fish, but the fishermen, those who used a net to fish, can no longer throw in their net, it has all become vegetation, it is pure marshland. You know, waste water flows into the lagoon, then the vegetation grows and it takes over. (Fisherman A)

Another fisherman who has been in the lagoon for around thirty years recounts:

[When I started], in relation to fishing, you could fish, it worked. You’d get your net, got down to the edge of the water and you’d throw it in, you used to catch mojarra (*diapterus* sp.), the best fish in the lagoon, you used to catch prawns. Then, over the years, everything began to change. It took longer to open [the sandbanks]... there used to be all this here... but it took longer to open, then it seemed that the fish became too clever, difficult to catch... we used to fish mainly cação (*Carcharrhinus* spp), didn’t we? Then it began to decline. (Fisherman D)

A reduction in the amount of fish is reflected by the increasing difficulty the fishermen had to earn their livelihood from fishing. Six fishermen explained how fishing used to be their main occupation with which they managed to earn a living and educate their children. However, today, almost all claim that they cannot support their families exclusively through fishing. Only one fisherman stated that it was possible to earn enough from this activity, despite the fact that he had other paid work. Two fishermen said it was possible to earn a living from fishing, but inadequately. Others said it was not possible to earn a living from fishing and that it was necessary to complement it with other work. One fisherman estimated that it was not possible to earn a minimum salary from fishing.

All the fishermen interviewed stated that in order to meet the needs of their families, fishing had to be complemented by other sources of revenue, whether pension or paid work. Among the fishermen there were retired men, small traders, a political advisor for a municipal councilor, a small-scale farmer and a public servant.

Combining different activities is not a recent phenomenon. The men stated that, alongside fishing, they have always had more than one job. However, they claim that up to two decades ago, most of their earning came from fishing or it constituted a major part of the family income.

An example of change can be observed from the choices made by subsequent generations and the plans fishermen who are fathers have for their children who reject fishing as a profession. Four of the fishermen interviewed stated that their children did not like fishing. The rest claimed that fishing is seen by their children either as a leisure activity or as a complement to their income, but that they pursued other professions which are city-based and mostly in offshore companies.

It is interesting to note that this occurrence is not only due to the fact that fishing conditions are more difficult, but also because, currently, in the region's labor market, there are a number of better paid jobs available. This is associated to the growth of the cities in the region, largely due to the offshore companies. However, the opportunities which benefit the fishermen's children are not viable options for the fishermen themselves. Most have not completed primary education, almost always a requirement. This state of affairs - that is, seeing their own working conditions worsen whilst their children have new and different opportunities - reflects the ambiguity with regard to the situation in which former artisanal fishermen find themselves, in face of the current development model in the region.

In order to gain a better understanding of their perception regarding the ongoing socio-environmental transformations, we analyzed the narratives of fishermen, focusing on the reasons why the amount of fish has decreased, both in the lagoon and in the sea. Explanations vary: two fishermen stated that there were too many people fishing; two commented on the large motor boats which frighten fish, especially at sea; four believed that it is due to a rise in population levels and the amount of sewage released in the lagoon; three fishermen thought that much of the blame lay with the fact that people fish during the closure periods; and finally, one person said that fish are cleverer and that they had learnt to avoid the nets, whilst another reminded us that Petrobrás, the Brazilian oil company, polluted the sea, resulting in a reduction in fish stocks and seafood.

It is striking that most (with one exception) did not mention the relationship between the decrease in fish stocks and the oil industry, very much in evidence in the region. Not even those who also fished in the sea. However, indirect causes are noted, due to the growth of the population which results in an increase in sewage.

Fishermen considered Petrobrás - the largest and most important company amongst others associated to oil extraction in the region - more in terms of benefits, such as jobs and programs for workers in the fishing industry, for example, courses and the donation of equipment. Some of the comments revealed a paternalistic or clientelistic attitude toward this company. It is seen as a "caring mother", it "supplies" kits and food baskets, as well as "offering" courses. These contributions are seen as favors and not as a way of mitigating the environmental damage it causes:

I knew Macaé as it was and today it is a good place, everything is better because Petrobrás is here and it helps a number of cities, so today, it is a good place. Petrobrás is a caring mother, it is in a number of places in the world, everywhere. If it weren't for Petrobrás, there would be no work in Macaé. (Fisherman A)

Two fishermen assessed the advantages and disadvantages of Petrobrás' arrival in the region:

For Macaé, Petrobrás was advantageous. It provided jobs for many people. But in Macaé, 90% of the people who work for Petrobrás are not from there. Because, for the people of Macaé, those who are really from there, few work in Petrobrás. You can believe it. Petrobrás arrived, finished with our beach, one of the best beaches we had in Rio, Imbetiba, it ruined it. I think Petrobrás was both helpful and harmful. (Fisherman B)

Look, Petrobrás, I can tell you it is an important partner for us fishermen. Because today, I can give a party, before I would not have the resources, now Petrobras is here, it supports me. You can see: here I have 60 school kits. I would not have the financial ability to donate this equipment. But, through Petrobrás, today, I will be able to deliver this. I will make a child smile, a family man happy, because had it been my child, I would not need to buy this equipment for him. And the people around here. I can see that Petrobrás has improved things. [It may be] that in some sectors, they may have caused some harm, to some fishermen. But how is Petrobrás going to produce? Because the work, there on the water, that's for both of us, it happens together, and you can see, I can see, that Petrobrás is concerned about the fishermen. It donates basic food packs. It sponsored the painting of these boats and now it is sponsoring the fishing equipment we are provided with. I cannot see that Petrobrás is harming our fishermen. Since it arrived, I have not seen it in this way. Because everyone needs to work. Whether you like it or not, Petrobrás is our competitor, because we all work in the same [physical] area. Everyone is working and defending their own interests. Petrobrás is defending their oil. We defend fishing. The thing is, we both work. And there are always conflicts, because they claim that Petrobrás can go to places that the fishermen cannot. And, in fact, the fishermen can't go to the platforms, because this is a risk area. (Fisherman G)

These two fishermen, when talking about their relationship with an offshore company, consider both advantages and disadvantages. Nevertheless, the latter passage reveals an attitude which, despite being partially critical, accepts clientelism to a certain degree.

It can be observed that due to oil exploration, the changes in the socio-economic profile of the region has two sides which are related and affect the lives of fishermen: 1) environmental impacts which are hardly mentioned. Only one fisherman directly associated these impacts to the negative effects on income from fishing activities; 2) the creation of new employment opportunities, enjoyed by many of their children. At the same time, these opportunities are taken up, both because of an intrinsic interest in new professional opportunities and because of the impossibility of following their father's profession.

It is clear that environmental injustice produced by the development model adopted is reflected both in a) the activities of companies which – due to environmental degradation - cause greater harm to the fishermen in the sample studied than benefit them directly through new opportunities, and b) the reproduction of social inequalities, where artisanal fishermen have been part of the lower echelons of society for generations. These situations remain potential sources of conflict. However, they do not manifest themselves as specific struggles for this sector.

Nevertheless, as we observed in the section above, other conflicts do come to the fore. What differentiates one type of conflict from another? In the final considerations we seek to put forward a few hypotheses.

### **Final considerations**

The situations of environmental injustice addressed here produce socio-environmental conflicts, given that artisanal fishermen feel the undesirable impacts which are the result of the activities of other social groups. They are negatively affected when reproducing their way of life. However, the active subjects involved cannot be made directly liable or even be identified as the perpetrators of these environmental injustices. These conflicts, therefore, remain latent because they cannot be translated into a clear awareness of injustice or into concrete actions in this regard.

On the other hand, the manifest conflicts observed in the case of the fishermen of Lagoa de Carapebus, are partly caused by the direct actions of the State which, by means of its repression and monitoring agents, specifically acted to restrict fishing activities. Furthermore, manifest conflicts occurred in situations when the fishermen did not feel recognized and respected as workers. The intensification of this phenomenon is associated to the creation of the National Park which encompasses the area in which the fishermen work.

Other explicit conflicts are the result of disagreements among fishermen in relation to topics such as the fishing ban during the closure period and the opening of the sandbanks. Conflicts intensified when a disregard for the legislation threatened the reproduction of fish and other seafood and, therefore, the social reproduction of fishermen themselves.

It is interesting to note that the latent conflicts identified here have a greater negative impact on the fishermen, in comparison to manifest conflicts. They exacerbate the reproduction of social inequalities and threaten the survival of the fishermen as a social category (and their physical survival, if they come to depend exclusively on this activity). In the narratives or attitudes of fishermen, there were no signs that these conflicts addressed the reduction or the end of environmental injustice.

On the contrary, the seeds of transformation are found in the conflicts which were externalized. The prohibitions brought about by the implementation of PARNA Jurubatiba and the increased monitoring presence of the government resulted in restrictions to fishing practices. However, the fishermen's response was to set up an association to defend the rights of workers. This allowed them to advance their knowledge of and

discuss their rights and duties. Events such as the closure period and the opening of the sandbanks also made discussions more urgent, bringing to the fore issues relating to the fishermen's working conditions and environmental conservation. During this process, the fishermen asserted themselves as social subjects who are able and should be their own mediators with the State and other social subjects involved in regional issues relating to work and the environment.

With regard to the unequal distribution of the environmental costs of large economic ventures, for these fishermen, environmental justice is still a nebulous issue, of which some are aware, others are only partially aware, whilst others are not at all aware. It is an issue that does not unify them or integrate their agenda for mobilization. With regard to their participation in decisions about using the environment, environmental justice (even when not referred to in these terms) appears as a significant issue in the daily lives of fishermen and is an element which leads to mobilization.

## Notes

- i The period of inland closure established by IBAMA last four months during which fishing is banned in order to preserve species (IBAMA, 2008). Professional fishermen are compensated by receiving a monthly minimum salary (Brasil, 1998).
- ii When transcribing the recordings of the interviews with the fishermen, incomplete words and grammatical errors in relation to the standard linguistic variety were corrected, without compromising the structure and the content of the sentences.
- iii The ICM-bio is an independent agency reporting to the Ministry of the Environment and is part of the National System for the Environment.

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# ENVIRONMENTAL JUSTICE, LATENT AND MANIFEST CONFLICTS: A CASE STUDY OF THE ARTISANAL FISHERMEN IN THE NORTHERN REGION OF THE STATE OF RIO DE JANEIRO

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**Resumo:** Este artigo tem como base um estudo de caso com pescadores artesanais que trabalham na Lagoa de Carapebus, uma lagoa costeira parcialmente localizada dentro de um Parque Nacional, criado em 1998, em uma região que vem adotando um modelo econômico baseado na extração de petróleo há cerca de três décadas no Norte fluminense, RJ. A partir de pesquisa de campo qualitativa e de abordagem teórico-metodológica que privilegia a ecologia política e a teoria do reconhecimento, identificam-se conflitos socioambientais vivenciados por esses pescadores em situações de mudanças de modelo socioeconômico regional e de implantação de unidade de conservação, e discutem-se razões e condições para que os conflitos se apresentem de forma latente – quando a injustiça ambiental não apresenta causas claras para eles – ou externalizada – quando há ação fiscalizadora e punitiva do Estado ou discordâncias quanto a regras de trabalho entre os próprios pescadores.

**Palavras-chave:** Justiça ambiental; Conflitos socioambientais; Pescadores artesanais.

**Abstract:** This article is based on a case study of fishermen working in a coastal lagoon partially located within a national park. The park was created in 1998 in a region which had prioritized for three decades an economic model based on the extraction of oil. A qualitative research and theoretical-methodological approach was used focusing on the theories of political ecology and recognition. The article identifies environmental conflicts experienced by the fishermen in situations of change and a regional socioeconomic model regarding the use of a conservation unit. It discusses the reasons why and conditions in which conflicts occur in a latent form - when environmental injustice has no clear causes - or in a manifest form - when there is monitoring and punitive action by the State or disagreements among the fishermen in relation to work restrictions.

**Key words:** Environmental justice; Environmental conflicts; Fishermen.

**Resumen:** Este artículo se basa en un estudio de caso con los pescadores que trabajan en la laguna costera parcialmente ubicada dentro de un parque nacional, creado en 1998, en una región que ha adoptado un modelo económico basado en la extracción de petróleo durante tres décadas. Este artículo usa investigación cualitativa y el enfoque teórico-metodológico que se centra en la ecología política y la teoría del reconocimiento, y el artículo identifica conflictos ambientales experimentadas por los pescadores en situaciones de cambios en el modelo socio-económico regional y el despliegue de la unidad de conservación, y examina las razones y condiciones para que los conflictos están presentes en forma latente - cuando la injusticia ambiental no tiene causas claras para ellos - o subcontratados - cuando hay una acción punitiva y la supervisión por el Estado o desacuerdos con respecto a las normas de trabajo entre los propios pescadores.

**Palabras clave:** Justicia ambiental; Conflictos ambientales; Pescadores.

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