# THE CASE OF ENVIRONMENTAL RACISM AT THE FUNDÁO DAM RUPTURE

# A QUESTÃO DO RACISMO AMBIENTAL NO EVENTO DO ROMPIMENTO DA BARRAGEM DO FUNDÃO

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#### Abstract

The increase of technological environmental disasters in Brazil have been worsening in recent decades, impacting a significant number of victims, mainly due to the several human rights violations and lack of commitment from the operating companies as well as from the State. As per the lens of the sociology of disasters, progressive neo-extractivism categories, and environmental racism, this article assesses the Fundão dam rupture, which occurred on November 5, 2015, in Bento Rodrigues/MG, and is considered the largest environmental disaster event ever occurred in Brazil. The main objective of this article is to evaluate how this event unfolded, with a clear focus on key developments as part of the emergency response and remediation actions: the creation of the Renova Foundation and the Federative Governance (State response). A qualitative methodology was adopted with the use of literature review, with emphasis

#### Resumo

O contexto das vítimas de desastres ambientais tecnológicos brasileiros vem se agravando nas últimas décadas, principalmente pelas inúmeras violações aos direitos humanos, por parte tanto das empresas responsáveis quanto do Estado. A partir da sociologia dos desastres e das categorias do neoextrativismo progressista e do racismo ambiental, analisou-se o caso do rompimento da barragem do Fundão ocorrido dia 5 de novembro de 2015 em Bento Rodrigues/MG; considerado o maior evento relacionado a desastre ambiental da história do Brasil. Este artigo tem como objetivo secundário analisar o evento, seus antecedentes e principais desdobramentos, com foco na resposta de remediação, incluindo a criação da Fundação Renova e a atuação da Governança Federativa como resposta estatal. Adotou-se metodologia qualitativa, com o emprego da revisão de literatura, com destaque para as contribuições de Valêncio, Giddens, Gudynas, Martínez-Alier e Acselrad: o estudo de caso do



on the contributions of Valêncio, Giddens, Gudynas, Martínez-Alier and Acselrad, the Fundão dam rupture case study and documentation analysis, and reports from the victims. All reports from the victims were obtained from the document Ata de Audiência Pública em Barra Longa (PR-MG-00000261/2020). This article concludes that the Renova Foundation, an organization created as a part of response to this event and to support the victims impacted by the disaster, was just a representative of the interests and conveniences of the mining company. Likewise, the accusations of environmental racism were found to be valid. It actually started when selecting the location for the dam.

**Keywords:** Fundão dam; technological environmental disaster; progressive neo-extractivism; environmental racism.

rompimento da barragem do Fundão; a análise documental e os relatos das vítimas, estes extraídos da Ata de Audiência Pública em Barra Longa (PR-MG-00000261/2020). Conclui-se que a Fundação Renova, criada como resposta ao fato, se mostrou como uma mera representante dos interesses e conveniências das mineradoras. Da mesma forma, consideram-se válidas as acusações de racismo ambiental, verificadas desde antes do evento, já na escolha do local da implantação da barragem.

Palavras-chave: barragem do Fundão; desastre ambiental tecnológico; neoextrativismo progressista; racismo ambiental.

#### Introduction

In 2015, Brazil experienced its largest socio-environmental technological disaster, caused by the Fundão Dam rupture in the municipality of Mariana, state of Minas Gerais (MG). The disaster released millions of cubic meters of mining waste that reached rivers and tributaries of the Doce River basin, reaching the coast of the state of Espírito Santo (ES).

Given these important environmental and social repercussions, amid the complexity and abundance of research topics that could generate analyses in this context, the issue of environmental racism stands out as an urgent topic. In this sense, the Fundão dam rupture was seen as an ideal case study to discuss this topic, given the scale and repercussions of the event.

According to a preliminary bibliographic review, there were several complaints of environmental racism practiced by the Renova Foundation (FR) corporate team towards those affected, as per analysis of the *Ata de Audiência Pública em Barra Longa (PR-MG8700000261/2020)* [Minutes of the Public Hearing in Barra Longa (PR-MG8700000261/2020)]. These reports are presented in this study. It was observed that part of the motivation for this lies in the fact that the business sector has taken the lead in recognizing or not the category of affected person on a case-by-case basis, according to its own judgment and its own conveniences.

Therefore, the following question was defined as the central problem: are the complaints collected in the Minutes of the Public Hearing in Barra Longa characterized as hypotheses of environmental racism? We also sought to sequence the research in order to (1) identify and understand the event in its main antecedents and developments, and (2) analyze the remediation response to the event: Fundação Renova (response from mining companies) + Interfederative Governance (state response).

Regarding the methodology used, an exploratory qualitative research was conducted by means of a bibliographic review and analysis of reports from the event victims, which were taken from the document Ata de Audiência Pública em Barra Longa (PR-MG8700000261/2020) Thus, the delimited object was assessed through the use of academic theorists, technical reports, legal opinions, management terms, technical reports, official websites, and multidisciplinary bibliographic reviews.

The hypothesis raised is that there were practices of environmental racism towards those affected by the Fundão dam rupture, racism practiced not only after the event, but also before it. These actions are reflected from the moment the location for the dam was chosen, as well as in the invisibility of Black people, who are the majority in the affected territories, their demands, and possible violations of rights that they are suffering in the remediation process by Samarco, which tends to systematically reproduce socioeconomic inequalities in the territories affected by the disaster. It was also noted that the lack of a category legitimized by all stakeholders<sup>1</sup> involved in technological environmental disasters leaves irreparable gaps for contexts of aggression against human rights to be perpetuated in events such as the aforementioned case study cited.

# 1 Background and responses to the event: Renova Foundation and interfederative governance

The Fundão dam rupture, which occurred on November 5, 2015, in Bento Rodrigues, a municipality located 26.2 km from Mariana and 85.2 km from the municipality of Barra Longa, all in MG, is still known as the largest environmental disaster event in Brazil's history, with wastewater traveling at least 663.2 km across MG and ES, affecting more than 1.5 million people and causing 19 deaths (Poemas, 2015). The "Mariana disaster", as it is popularly known, is considered

<sup>1</sup> The term stakeholders designates the group or individual that is affected by the objectives of the organization or corporation (Freeman, 2015).

the greatest global tragedy of the century in terms of tailings dams, since an estimated 44 million cubic meters of mining waste were deposited in the affected areas, mainly composed of iron oxide and silica (Bowker; Chambers, 2017).

In more detail, Bento Rodrigues and its surroundings practically disappeared, immersed in mud in just a few minutes, completely compromising any water security system that had been implemented in the region. Totally contaminated, the mud reached the Doce River, a river basin that supplies water to the population of the 39 affected municipalities, impacting the water supply, food, tourism, economic and subsistence activities, in addition to the maintenance of local flora and fauna, which is essential for the health of the region's ecosystems and for the survival of local riverside dwellers, islanders, sand miners, fishermen, and farmers (Poemas, 2015).

The event was found to be the responsibility of local mining companies, whose property losses are estimated at 100 million reais, and Samarco Mineração S.A.,<sup>2</sup> the company managing local operations, was held responsible for the tragedy (Terra, 2022). Official reports, technical reports, police investigations, and analyses by independent agencies indicate that the event was not a fatality, since the dam was in a process of structural degradation that was already known to the group's operations. Nevertheless, due to internal pressures regarding cost reduction, among other reasons, investments in maintenance were reduced, which set an undeniable precedent for accountability.

Due to the complexity of the emergency situation that arose, the states most directly involved (MG and ES) together with the Union established a model for disaster management with the responsible mining companies, initially agreed upon by the Transaction and Conduct Adjustment Term (TTAC).

This management model was later called interfederative governance (GI), a management system that would bring together the Interfederative Committee (CIF), a group formed by state entities, and a private foundation, the FR, independently representing the companies responsible for the event in remediation actions. The GI was created as a State representation, and the FR as a private sector representative. As for the CIF, it would oversee the execution of the reparation programs carried out by the FR, which would be in charge of the socio-environmental and socioeconomic reparation and compensation plan for the affected

<sup>2</sup> Privately held mining company formed by partners BHP and Vale. Samarco S.A. resumed its operations in the region in late 2020, after a five-year shutdown for socio-environmental recovery. It is part of one of the largest joint-venture mining groups in the world, between the Anglo-Australian BHP Billiton and Vale S.A.

areas. It is worth noting that this management model is still in operation today (Câmara; Terra; Miranda, 2019).

The FR is a non-profit organization with the presence of more than 70 entities, as a result of the TTAC legal agreement. It is responsible for mobilizing the repair of the damage caused by the Fundão dam rupture, currently integrating 42 programs implemented along the Doce River and tributaries and the ES estuarine and coastal zone. It was created by mining companies and strategically designed to be a private entity, that is, independent from mining companies. The objective was to have a company linked to mining companies, so that the companies responsible for the disaster could repair the damage, a neutral entity that would respond impartially to the demands of victims, also giving them a voice in decision-making processes, that is, the people affected by the event are its main audience, but the participation of civil society in the FR is not a reality.

> The Federal Prosecution Office (MPF) filed an appeal against the agreement approval, expressing disagreement regarding: (i) lack of participation of those affected; (ii) establishment of a financial ceiling for the expenses to be incurred by companies for the adoption of measures to mitigate, repair, compensate, and indemnify the damages verified; (iii) lack of a definitive diagnosis of the environmental damage verified, and (iv) disregard of the joint and several liability of the Public Authorities (Terra, 2022, p. 99, free translation)3.

Although the TTAC provided for means to ensure social participation, it is pointed out that this has not occurred, mainly due to the fact that the FR opposed the hiring of independent technical consultants, mitigating or even making popular participation in discussions and decisions on offered remediation programs unfeasible. Likewise, the victims have not participated in the decisions surrounding the creation of the Observers Forum and do not have seats on the Foundation's Board of Trustees, two fundamental bodies to ensure its proper functioning.

Regarding CIF, it is a backbone structure that articulates the GI, without legal personality. Formed by several state bodies and entities, its function is to ensure that the environmental reparation and compensation programs implemented by the FR work efficiently for the victims, mainly with regard to compensating for

<sup>3</sup> In the original: "O MPF recorreu da homologação do acordo, manifestando discordância em relação: (i) A falta de participação dos atingidos; (ii) ao estabelecimento de teto financeiro para os gastos a serem realizados pelas empresas para a adoção de medidas de mitigação, reparação, compensação e indenização dos danos verificados.; (iii) ausência de um diagnóstico definitivo dos danos ambientais verificados; (iv) desconsideração da responsabilidade solidária do Poder Público (Terra, 2022, p. 99)".

the losses caused at social, environmental, and economic levels. This is an unprecedented disaster management model.

As a way of responding to the criticism suffered by the FR regarding the lack of popular participation in decisions related to environmental reparation and compensation programs, some changes were implemented in 2018, expressed with the creation of the TAC-Governance (TAC-GOV). The promise was to bring more social participation, which has not actually happened.

In almost a decade of operations, the FR has been criticized for limiting popular participation in decision-making processes and for not maintaining direct, conciliated, facilitated, mediated, and arbitrated negotiations with victims. However, it has not shown itself to be indifferent to the mining companies' interests, which, in addition to being the entity's financial supporters, hold the decision-making power over action plans.

Given the FR founding model and the way it has been operated, many victims, representatives, and justice institutions consider it ineffective today, to the point that there are already several lawsuits and administrative inquiries against it in the MPF, including the Minas Gerais' Public Prosecution Office (MPMG), requesting its dissolution. Likewise, the GI's operations are already being referred to as a mere "privatization of the disaster" (Terra, 2022).

It appears that the cause of the event was a business structure traditionally focused on profit-related decision-making, which is also responsible for repairing the damage it caused. In this scenario, civil society would be an essential member of monitoring, dialogue, and participation in this process, given that it represents those most interested in the proper functioning of the FR's repair programs. The fact that the victims were ignored in their participation led to deep criticism, which, among other factors, includes accusations related to the mining companies, which tried to limit their liability for the event to R\$20 billion—according to Terra (2022), an attempt to shield their assets.

The mining companies are also accused of neglecting the dam's maintenance and of not promoting efficient proactive prevention actions, mainly due to pressure from senior corporate leaders related to costs and production. Similarly, according to some of the reports cited here, several victims point out that not only legal accountability and the effectiveness of the reparation offered by the FR are points to be discussed, but also cases of discrimination and violence related to racism and social discrimination. They also point out that the quality and level of reparation offered by the FR in the locations reached by the event varies, meaning that some locations receive more assistance than others.

# 2 The contribution of the sociology of disasters and the category of environmental racism highlighted in the context of the event

Talking about disasters in Brazil, whether natural, technological, social or hybrid, means walking in a territory that is still undergoing consolidation, even considering the number and severity of disasters that have been challenging communities in contemporary times. On this subject, it is worth noting that it was only from 1970 onwards that the social sciences took on the task of discussing the nature of disasters and their social impacts, which, depending on each social organization, have very different effects. The understanding of disasters for sociology focuses centrally on the "[...] social structure and dynamics that, in a multidimensional and multi-scale context, give rise to varied interpretations about the territorial, institutional and historically produced social relations"<sup>4</sup> (Valêncio *et al.*, 2009, p. 5, free translation).

Regardless of whether or not the disaster or disasters are the result of the same occurrence, given their impacts, variables such as poverty, vulnerability, settlement conditions, and public policies have become part of the list of indicators to be analyzed, especially when considering each impacted region's particularities. In other words, the cause of the disaster is not necessarily the central point, but rather the aspects of each victim community's internal vulnerability, which makes a disaster a very different concept from what is understood as an event, that is, the occurrence that originated it, the cause. By dissociating disaster from event, therefore, it becomes possible to perceive the expression of each community's social vulnerability and infer the several disasters that are usually caused by a single and the same event.

It can be said that the meaning attributed, which is particular to each culture, is very relevant when measuring the impacts of disasters. In addition to being a mere materialized emergency phenomenon, with an objective and unanimous interpretation, a disaster is something symbolically created and socially interpreted by the attribution of meaning. It is a particular experience for each community, given that the political, economic, social, cultural, and psychological processes of perceiving, experiencing, and reacting to an emergency context will be unique and topical. Again, taking this into account, an event can cause several different disasters due to the number of communities affected (Valêncio *et al.*, 2009).

<sup>4</sup> In the original: "[...] estrutura e dinâmica social que, num âmbito multidimensional e multiescalar, dá ensejo a variadas interpretações acerca das relações sociais territorial, institucional e historicamente produzidas".

Regarding the actors in the processes of attributing meaning, significance, and definition of a disaster, they hold central responsibility for their social constructions and perceptions, which are often tactically amplified or minimized by the strategic use of information. Raising public awareness, recognizing the disaster by the institutions involved, and producing related communication, for example, strongly influences the extent, importance, and significance of the disaster. This makes the role of the State, institutions, media, and publications fundamental, whether they come from common sense or from journalistic, corporate, political, and academic lines.

The heterogeneity and multidisciplinarity of the actors involved are such that it is extremely difficult to understand the real magnitude of a disaster. Given the diversity of interests, all communication and information related to the disaster becomes one of the most important variables of political articulation, a true tool for disputing the interpretation of the disaster, in which interests and conveniences manifest themselves, articulate, and clash (Valêncio *et al*, 2009).

Consequently, some authors state that the current world is experiencing "[...] a phase in modern society in which the social, political, economic and individual risks increasingly tend to escape the institutions to monitoring and protection in industrial society" (Giddens; Beck; Lash, 1997, p. 15). This is a process that, for not being homogeneous, ordered and centralized, is fragmented and produced by different flows of non-linear and incompatible purposes, not only on the part of the public administration, but also of the social environment and institutions as a whole. The most influential actors' interests end up guiding and confusing the social attribution of meaning to disasters according to their own conveniences (Giddens; Beck; Lash, 1997).

Another aspect that further reinforces how particular the effects of the event are in each social context, that is, in each disaster, is that they are always limited to certain spaces and social moments, which, in themselves, already manifested their own local crises, well before the disaster. The new and unexpected emergency crisis will necessarily be permeated by other local crises, which are different from community to community, impacting the lives of the social subjects affected in different and particular ways. Thus, the interaction of the event with each local context will result in disparate and multidimensional crises, that is, a different disaster for each social nucleus (Valêncio *et al.*, 2009).

Valêncio *et al.* (2009), in their approach to the various disasters that can be caused by the same event, mention three main factors: (1) the internal vulnerability of each community and culture, which is necessarily shaped by the topical and

particular crises of each local social moment; (2) the attribution of meaning, significance, and definition that each disaster carries almost individually, and (3) the conveniences observed regarding the use of the information created and disclosed, which generally comes from various sources and means. This shows the design of an indisputably vulnerable context for a strategic and premeditated entailment of

From this perspective, it is clear that the development phases of extractivism have historically expanded their spaces in the world through the premeditated exploitation of these aspects, basically summarized in the vulnerability of others and the lack of unanimity, both in the attribution of meaning and value and in the use of information. From a totally confused and defenseless fragility, without strength, voice, or representation, such territorial and social contexts reveal themselves as easy prey for the establishment of unethical, almost lawless exploitation. This is how the progressive neo-extractivism movements, the current extractivism moment in Latin America, show themselves.<sup>5</sup>

## 2.1 Progressive neo-extractivism

risks.

With the promise of appropriation in order to redistribute wealth, progressive neo-extractivism is a development model focused on the appropriation of natural resources for production that, in most cases, subordinates everything and everyone that is preventing its unbridled attempt at economic growth. As a concept defined mainly to refer to Latin American countries and their historical movements of exports and internationalization subordinated to the globalization demands,<sup>6</sup> neo-extractivism presents itself as a more modern redefinition of the concept of extractivism, which, among other similarities, has always been linked to the extraction of mineral resources.

Necessarily holding the State legitimacy for its practices, in this new exploitation version, the public sector has also become a principal figure (Gudynas, 2012).

Under the pretext of combating poverty and social inequality by encouraging economic development, the State "silently" facilitates, authorizes, and encourages

<sup>5</sup> The debate on progressive neo-extractivism as a development model focused on the appropriation of natural resources for a production that, in most cases, subordinates everything and everyone that is preventing its unbridled attempt at economic growth must be considered in this context in order for us to understand the historical processes and movements of exports and internationalization subordinated to the demands of globalization supported in the Brazilian case, focused on the extraction of mineral resources.

<sup>6</sup> Progressive neo-extractivism is a contemporary version of Latin developmentalism from the 20th century onwards (Gudynas, 2012).

growing local dependence, always related to the unbridled extraction of natural resources by relaxing legislation, facilitating licensing, and ensuring impunity for environmental violations. This quest to attract foreign investment results in immeasurable social abuses, a process that has been fueling resistance, especially against mining companies, the production line that is at the epicenter of this development model (Gudynas, 2012).

Among the criticisms of progressive neo-extractivism, specifically aimed at mining companies, one points out that fossil fuel extraction causes immeasurable health problems not only for active employees in field operations, but also for peripheral communities. Likewise, their operations lead to environmental degradation and cannibalization of local natural resources, and make other local activities unviable, such as livestock farming, agriculture, and fishing, monopolizing the local labor market and subjecting locals to unprecedented dependence (Martínez-Alier, 2007).

As the risks and damage that the installation of these mega-projects causes in the territory are already predictable, they generally occur in remote areas with little representation, voice, and visibility. The State's scarce strategic presence in these places ensures that multinationals gain space and power, which is also a State strategy. The result is, mainly, a permanent and destructive change in living conditions and in local social and territorial dynamics. Entire areas are practically converted to "sacrifice zones" in favor of capitalism and globalization (Gudynas, 2012).

As Martínez-Alier (2007) affirms, the State's role is fundamental to the creation of a balanced relationship between political ecology and ecological economics, which invariably leads to discussions related to environmental justice. Basically, this conceptual line of Justice values environmental policies, laws, and regulations that ensure fair and equality in the distribution of environmental risks and consequences.

[Environmental justice is] the pursuit of fair treatment and meaningful involvement of all people, regardless of their race, color, national origin, or income, in the elaboration, development, implementation and enforcement of environmental policies, laws and regulations. By fair treatment we mean that no group of people, including ethnic, racial or class groups, should bear a disproportionate share of the negative

<sup>7</sup> Sacrifice zones are strategically chosen locations for the implementation of risky environmental projects because they are inhabited by the lower middle class. Given that in these areas the environmental compensation and fines are of lower value and the local population has little representation and voice, the choice of these regions is systematically made for social, political, and economic reasons, which raises the term to the agenda of discussions in the line of environmental justice studies. Therefore, separating social and environmental aspects has become difficult in recent years (Acselrad; Mello; Bezerra, 2009).

environmental consequences resulting from industrial, commercial and municipal operations, from the implementation of federal, state, local or tribal policies and programs, as well as from the consequences resulting from the absence or omission of these policies (Bullard, 2004, p. 45, free translation)8.

Nonetheless, the ecological and social debt that has been unfairly authorized by progressive neo-extractivism movements only reinforces the historical imperialist logic of expropriation of peoples, especially those in the third world, where the most profound social devastation of the environment is observed (Martínez-Alier, 2007).

> [...] it is to poor regions that the most environmentally damaging economic ventures have been directed [...]. The term environmental injustice has been used to describe this phenomenon of disproportionate imposition of environmental risks on populations with fewer financial, political, and informational resources". [...] "companies, aware of the dangers they cause, develop policies to win the sympathy of local populations for their ventures in order to avoid mobilizations that question their operating conditions (Acselrad; Mello; Bezerra, 2009, p. 9-81, free translation)9.

In light of what is understood as environmental justice, this context invites us to additionally observe the concept of environmental injustice, that is, the "mechanism by which unequal societies allocate the greatest burden of environmental damage from development to social groups of workers, low-income populations, discriminated racial groups, marginalized and more vulnerable populations"10 (Herculano, 2008, p. 2, free translation).

Mirroring this conceptual reasoning in the discussions presented previously, in which Valêncio et al. (2009) and Gudynas (2012) debate vulnerability and

<sup>8</sup> In the original: "[Justiça ambiental é] a busca do tratamento justo e do envolvimento significativo de todas as pessoas, independentemente de sua raça, cor, origem ou renda no que diz respeito à elaboração, desenvolvimento, implementação e reforço de políticas, leis e regulações ambientais. Por tratamento justo entenda-se que nenhum grupo de pessoas, incluindo-se aí grupos étnicos, raciais ou de classe, deva suportar uma parcela desproporcional das consequências ambientais negativas resultantes de operações industriais, comerciais e municipais, da execução de políticas e programas federais, estaduais, locais ou tribais, bem como das consequências resultantes da ausência ou omissão destas políticas".

<sup>9</sup> In the original: "[...] é para as regiões pobres que se têm dirigido os empreendimentos econômicos mais danosos em termos ambientais [...]. Para designar esse fenômeno de imposição desproporcional dos riscos ambientais às populações menos dotadas de recursos financeiros, políticos e informacionais, tem sido consagrado o termo injustiça ambiental". [...] "as empresas, conhecedoras dos perigos que causam, desenvolvem políticas de conquista da simpatia das populações locais aos empreendimentos a fim de evitar mobilizações que questionem suas condições de funcionamento".

<sup>10</sup> In the original: "mecanismo pelo qual sociedades desiguais destinam a maior carga dos danos ambientais do desenvolvimento a grupos sociais de trabalhadores, populações de baixa renda, grupos raciais discriminados, populações marginalizadas e mais vulneráveis".

progressive neo-extractivism movements in Latin America, one can see the occupation of historically vulnerable social and territorial contexts in Brazil as a business strategy. Furthermore, it is clear that industrial facilities have chosen to establish their operations in areas without a voice or representation, which, in Brazil specifically, are mostly inhabited by Indigenous, *quilombola*, riverside and peripheral communities, that is, mostly made up of mixed-race/Brown and Black people (IBGE classification). Consequently, this audience has become the most affected by the disasters that have been occurring in Brazilian territory, using as examples here not only the Fundão dam rupture, but also the Brumadinho dam rupture.

Thus, talking about environmental justice and injustice requires examining the contexts of discrimination, prejudice, and racism also established through progressive neo-extractivism operations, which broadens this debate a little further. As a result, there is an undeniable space to observe and confront the concept of environmental racism in light of the event that is the object of analysis of this research, as seen below.

#### 2.2 Environmental racism

An indisputable support for better understanding the concept of environmental racism is shown in the observation of the people most affected by the latest technological environmental disasters that have occurred in Brazil. The majority of these are the poor, those with less education, Black people (Black and Brown people – IBGE classification), and those who work for subsistence, that is, those who are always the most vulnerable, all victims of

[...] social and environmental injustices that fall disproportionately on vulnerable ethnic groups. Environmental racism is not only configured through actions that have a racist intention, but also through actions that have a racial impact, regardless of the intention that gave rise to them. It concerns a very specific type of inequality and environmental injustice: that which falls on their ethnic groups, as well as on all groups of so-called traditional populations – riverside dwellers; people involved in extractivism; geraizeiros; fishermen; pantaneiros; caiçaras; vazanteiros; gypsies; Pomeranians, terreiro comunities; faxinal system people; quilombola communities, and so on – that have been faced with the "arrival of the strange", that is, large development projects – dams, monoculture projects, shrimp farming, mariculture, waterways and highways – that expel them from their territories and disrupt their cultures, either by pushing them into the slums on the cities' outskirts or by forcing them to live with a daily routine of poisoning and degradation of their living environments. If such non-urban populations face such an arrival of the strange,

others, in the cities, live in sacrifice zones, close to polluting industries and chemical waste sites that, for being synthetic, are not metabolized by nature and, therefore, accumulate (Herculano, 2008, p. 16, free translation)11.

Historically, most populations in the outskirts and less privileged areas are made up of minorities, including ethnic minorities. This fact, in itself, has always denoted contexts of racism and discrimination with very deep roots. Nevertheless, until then, only the concepts of racism, discrimination, and injustice were discussed, without derivatives. Racism became environmental when the scale of discrimination was configured for the strategic exploitation of vulnerability in the disposal of environmental risks and consequences.

The term environmental racism means that racist practices, voluntary and/or involuntary, are determinants of the environmental conditions to which "vulnerable groups are submitted, due to some factor that confers identity, such as race, color, national origin or income, with regard to the development, implementation and application of environmental policies, laws and regulations"12 (Souza, 2015, p. 24, free translation).

Extractive development movements—currently with progressive neo-extractivism as the latest dominant model in the South-South axis—have been using these areas, which are already home to vulnerable and subjugated populations, as a dumping ground for environmental risks and degradation. Since the proportion of responsibility attributed in these cases has historically been minimized by the lack of local representation, these are the areas—and therefore these populations—that are most often chosen for the so-called sacrifice in favor of development.

<sup>11</sup> In the original: "[...] injustiças sociais e ambientais que recaem de forma desproporcional sobre etnias vulnerabilizadas. O racismo ambiental não se configura apenas por meio de ações que tenham uma intenção racista, mas igualmente por meio de ações que tenham impacto racial, não obstante a intenção que lhes tenha dado origem. Diz respeito a um tipo de desigualdade e de injustiça ambiental muito específico: o que recai sobre suas etnias, bem como sobre todo grupo de populações ditas tradicionais -ribeirinhos, extrativistas, geraizeiros, pescadores, pantaneiros, caiçaras, vazanteiros, ciganos, pomeranos, comunidades de terreiro, faxinais, quilombolas etc. - que têm se defrontado com a 'chegada do estranho', isto é, de grandes empreendimentos desenvolvimentistas – barragens, projetos de monocultura, carcinicultura, maricultura, hidrovias e rodovias - que os expelem de seus territórios e desorganizam suas culturas, seja empurrando-os para as favelas das periferias urbanas, seja forçando-os a conviver com um cotidiano de envenenamento e degradação de seus ambientes de vida. Se tais populações não-urbanas enfrentam tal chegada do estranho, outras, nas cidades, habitam as zonas de sacrifício, próximas às indústrias poluentes e aos sítios de despejos químicos que, por serem sintéticos, não são metabolizados pela natureza e, portanto, se acumulam".

<sup>12</sup> In the original: "submetidos grupos vulnerabilizados, em razão de algum fator conferidor de identidade, a exemplo de raça, cor, origem nacional ou renda, no que diz respeito ao desenvolvimento, implementação e aplicação das políticas, leis e regulamentos ambientais".

Thus, the distribution of environmental impacts in nations is not equally configured among territories and their populations, as can be seen. They are the marginalized, the vulnerable, the invisible, the defenseless, the voiceless; those condemned to deal with the consequences of development, consequences that are now environmental. This is, therefore, environmental racism.

Revisiting the connection between justice, the environment and equity, using here a lens focused on Brazil and its particularities, the discussion on environmental racism is well contextualized with the socio-environmental aspect of the current national progressive neo-extractivism model.

Due to the inability and—why not?—convenience, in many cases, of the state and institutional machines in proposing social solutions for concepts that are still so new, the contexts of environmental racism prove complex to be identified, measured and resolved, especially in a country as mixed-race as Brazil. For this reason, "the social and environmental injustices that fall relentlessly on vulnerable ethnic groups and other communities, discriminated against because of their 'race', origin, or color"<sup>13</sup> are devastating (Pacheco, 2014). During the Samarco dam disaster in Mariana in 2017, a preliminary analysis of the victims' sociodemographic profile was carried out, suggesting evidence of discrimination: according to Atlas Brasil, this municipality was home to 59,857 people, and 38,990 individuals (66.81%) self-identified as Black (IPEA, 2017).

From this perspective, progressive neo-extractivism plays a prominent role in promoting environmental injustice. Large-scale projects completely change the lives of those who, from the outset, already lived in vulnerable situations, in underprivileged areas and on the margins of capitalism. Normally practicing a basic economy, often almost subsistence, these people have their existence made invisible and inferior by the social impacts fostered by an invisible environmental racism, simply for practicing a life far from hegemonic modernity, based on dependence on the local ecosystem and their community (Herculano, 2008; Martínez-Alier, 2007).

It is through the practice and acceptance of environmental injustice that the environmentalism of the poor<sup>14</sup> and environmental racism are legitimized, since the current "imperialist" incentive for unbridled economic growth, called progressive neo-extractivism, drives and encourages this context (Martínez-Alier, 2007).

<sup>13</sup> In the original: "as injustiças sociais e ambientais que recaem de forma implacável sobre grupos étnicos vulnerabilizados e sobre outras comunidades, discriminadas por sua 'raça', origem ou cor".

<sup>14</sup> As Martínez-Alier (2007) states, this concept addresses the intersection between human and natural aspects, legitimizing grassroots conflicts, normally contextualized with those who live off an ecosystem now threatened by progressive neo-extractivism practices.

With regard to the region affected by the Fundão dam rupture, besides the complaints about environmental racism presented in the next topic, the choice of the region for the dam construction stands out. Vulnerable regions and the continuous and unattended creation of risks are inherent characteristics of neo-extractivism operations, as explained by Gudynas (2012). Initially, the damage and risks are always camouflaged, related only to the locals, the invisible, the vulnerable.<sup>15</sup>

Observing the event unfolding, we see yet another classic case of environmental injustice facilitated by the State, which is not far from the historical extractive foundations of the region, the basis of much slavery and mining exploitation. The exploitation of the historical vulnerability of local minorities that have historically been silenced and made dependent on mining exploitation to survive was what legitimized the cases of violence, 16 discrimination, and environmental racism, which began even before the event occurred, with the choice of the location for the dam.

## 3 The collected reports

This section presents some of the reports collected from the document resulting from the public hearing held at the Barra Longa City Council, the Ata de Audiência Pública em Barra Longa (PR-MG-00000261/2020), which brings together all the statements reproduced. It should be noted that all mentions of the words Black, mixed-race and descendants made by the authors throughout this article refer to the IBGE classification.

According to the victim Sérgio Fábio do Carmo, member of the Affected Committee, the Health Collective, and the editorial office of *A Sirene* newspaper, the issue of gold miners also deserves attention. It highlights the historical marginalized situation of Black people (IBGE classification) brought from Africa to the

<sup>15</sup> Still speaking of neo-extractivism, other typical characteristics of this development model can be mentioned, such as the generation of dependency. Mariana has always generated some revenue from ecological tourism, which therefore contributed to its economic maintenance and the generation of jobs and services. However, these numbers have never been comparable to the generation of municipal income resulting from the presence of mining companies in the region, which invariably legitimized such economic dependence and local specialization in the mining area (Poemas, 2015).

<sup>16</sup> Poverty, in parallel with local rurality, has always ensured the relationship with mining companies, legitimizing it socially through a feedback of survival. Thus, the installation of mining activities in the region was facilitated and well accepted by the standard of living, history, and lack of local opportunities (Mansur et al., 2016). This context also prevented other economic activities from being developed in the region, which, over time, increased the dependence on a model of explicit consensual exploitation, which once again metaphorizes the colonial beginnings of Mariana, based on slavery (Poemas, 2015).

region during the colonial era, many of whom working in mining. As he points out, MG had its economy built on the work of this class, which gave rise to a series of traditional communities, such as *quilombolas*, riverside communities, and people living in remote places. Sérgio do Carmo states that those people, generations of mining professionals who lost their livelihood due to river contamination, are not recognized as victims by the FR, on the grounds that it is an activity considered illegal and, for this reason, does not receive compensation.

Sérgio Fábio do Carmo (Victim: Sérgio Papagaio) (Member of the affected people committee, the health collective, and editorial office of A Sirene newspaper): [...] However, Black people, taken from Africa and brought [for...] for slave labor in the region, both for the Empire's mining and for the Church's mining, were not censused. And there were one hundred and sixty-three thousand Black men and women, who spread from Ouro Preto to Barra Longa. [...] Time passed, [the...] gold ran out and the miners were considered outcasts, like disposable utensils and thrown to the margins of society. Today, the Renova Foundation says it cannot recognize the miners because mining is an illegal activity. And I affirm that, according to Convention 169, the miners are the traditional mining community of the state of Minas Gerais. [And...]. In this case, this mining operation that I coordinate, that I represent here at this moment, is a traditional community, it is a continent in which various contents from other traditional communities are inserted, because, for the mining operation to develop, it was necessary to establish several quilombola communities of lack people taken from Africa. In order for the mining [ee] to work, it was necessary to establish riverside communities and there are people living in remote places... And we have a series of traditional communities within this mining continent. And when Renova says that it only recognizes the miners, it is doing like the Portuguese who arrived here and named the Indigenous people Botocudos, which is a pejorative term, because they try to do the same with the miners, saying that they are faiscadores. The state of Minas Gerais was not invented by faiscadores, but by gold mining. Therefore, we are miners. [And by...]. After the dam collapsed, the Fundão dam, in addition to the mud that stirred and contaminated the river, several stones were placed, as they say, riprap, on the banks of the Carmo River, which prevents any mining practice, whether motorized, manual, or in any way. Therefore, we who have been affected to this degree, ask for recognition and reparation [sic passim] (MPF, 2020, p. 16, emphasis added, free translation). 17, 18, 19

<sup>17</sup> All reports presented were transcribed according to the research source.

<sup>18</sup> Considering the density of the narration, it was understood that further fragmenting and reducing some of the reports presented would result in a loss of context and understanding. This justifies the size of some statements.

<sup>19</sup> In the original: "Sérgio Fábio do Carmo (Vítima: Sérgio Papagaio) (Membro da comissão de atingidos, do coletivo de saúde, e da editoria-chefe do jornal A Sirene): [...] Só que os negros, arrancadas da África e trazidos [para...] para o trabalho escravo na região, tanto para o garimpo do Império quanto para o garimpo da Igreja, não foram recenseados. E somavam-se cento e sessenta e três mil negros e negras, que se espalharam de Ouro Preto até Barra Longa. [...] Passou-se o tempo, [o...] acabou-se o ouro e os garimpeiros foram colocados como marginais, como utensílios descartáveis e jogados à margem da

Professor Dulce Maria Pereira compares the situation of the event victims to an Apartheid context, stating that, through her research, she concluded that there were contexts of extreme inequality in the reparations given by the FR, inequality indisputably linked to ethnic and racist issues. She also makes comparisons with historical colonial positions, such as foreman, slave catcher, masters and tortured Black, implying that history repeats itself. She adds to her report discussions related to "necroengineering", which she defines as the engineering of death. She uses terms such as racism materialized in the territory, human massacre, and poor quality of life.

> Dulce Maria Pereira (professor): It's shocking! It's apartheid! Apartheid means: [to develop...] unequal development. It's terrible! For example, one of the facts we found was that: a single small Black producer received decent care, on par with the care of other non-Black people, that is, White people [ee] people who already had capital, that is, money, and who really received quality care. I don't need to mention this, it's obvious! If you take the road towards Gesteira, you can see the inequality in the treatment given, including the processes, what we call remediation. [...] But why [was] only one Black person got adequate treatment? And did his demands get met? He himself says, he himself says: because he was enticed by Renova, because he, what do they say? [A member of the assembly says: "He was bought"] He was bought, right? So, then, people know. I won't mention names. [I...] You know it's true, because, in fact, it was someone who worked against other Black people and the others who were affected, and so, he got privileges. [That which we...]. By the way, [we call it...] is it the foreman, right? [The guy who serves the...]. It's the Black guy, the slave catcher, who serves the masters, even torturing his peers. Now, guys, [racism, racism is...] racism is something so extraordinarily efficient, that I remember some people who live downtown complaining, complaining, that they had been affected: 'Ah, the people up on the hill wasn't', why? Because the hill was home to [the... the...] Black people, the poor, single mothers, older ladies, etc. But how surprised we were when we saw something that in Engineering we call necroengineering. Necroengineering is the engineering of death, it is engineering for

sociedade. Hoje, a Fundação Renova diz que não pode reconhecer os garimpeiros porque o garimpo é uma atividade ilegal. E eu afirmo que, pela Convenção 169, o garimpo é a comunidade tradicional garimpeira do estado de Minas Gerais. [E...]. No caso, esse garimpo que eu coordeno, que eu represento aqui neste momento, é uma comunidade tradicional, é um continente no qual está inserido vários conteúdos de outras comunidades tradicionais, porque, para que o garimpo se desenvolvesse, foi preciso que estabelecesse várias comunidades quilombolas dos negros arrancados da África. Para que o garimpo [é...] funcionasse, foi preciso estabelecer comunidades ribeirinhas e tem recantiados... E temos uma série de comunidades tradicionais dentro desse continente garimpo. E quando a Renova diz que só reconhece os faiscadores, ela faz como os portugueses que chegaram aqui e colocaram o nome nos índios de botocudos, que é um termo pejorativo, que eles tentam fazer com os garimpeiros, de dizer que eles são faiscadores. O estado de Minas Gerais não foi inventado pela faiscação e, sim, pelo garimpo. Portanto, somos garimpeiros. [E pelo...]. Após o rompimento da barragem, a barragem de Fundão, além da lama que revolveu e contaminou o rio, foram colocadas várias pedras, como eles dizem, roncamento, nas margens do rio Carmo que impede qualquer prática de garimpo, seja ela motorizada, seja ela manual, seja ela de qualquer forma. Portanto, nós que fomos atingidos neste grau, pedimos reconhecimento e reparação [sic passim]".

death. [...] Then we started hearing people say things like: 'Ah, there was no mud here, but the mud was taken up the hill'. [...] I've never seen anyone take mud from the city center to the outlying areas, except for the practice of technological racism! Except for racist practices! [Assembly reacts in agreement, applauding]. Now I want you to tell me what the logic is, what the logic is, [what the ...]. Guys, what is in the mind of a human being who uses technology to do something like this? Between you and me! It is not embarrassing, my dear colleague Tatiana, to belong to an institution where some of our colleagues participated in this abominable thing: distributing, even distributing, even distributing this mud that carried waste! And finally, I will just say this: there is a terrible process in relation to women!" [sic passim] (MPF, 2020, p. 38, emphasis added, free translation)<sup>20</sup>.

Caíque Belchior, representative of the *Centro de Convivência Negra* [Black Coexistence Center] of Universidade Federal de Minas Gerais (UFMG), states that the reports mention the non-bailable crime of racism against Black and poor people, which cannot go unpunished. It implicitly exposes the State's irresponsibility, citing the lack of public policies that guarantee the victims' rights.

Caíque Belchior (Representative of the UFMG Centro de Convivência Negra): "[...]. It is very clear that what Renova is doing, what Vale and Samarco are doing is a non-bailable crime, which is the *crime of racism*. Yes, *it is not racial injury, which* 

<sup>20</sup> In the original: "Dulce Maria Pereira (professora): É impressionante! É um apartheid! Apartheid quer dizer: [desenvolver...] desenvolvimento desigual. É terrível! Por exemplo, um dos dados que nós constatamos foi que: um único pequeno produtor negro teve atendimento digno, à altura do que foi o atendimento de outros não negros, portanto, brancos, [é...] pessoas já capitalizadas, quer dizer com dinheiro, e que tiveram realmente um atendimento de qualidade. Eu não preciso citar isso, é visível! Se vocês vão, ali, pras estradas, mais sentido Gesteira, vai por ali, vocês conseguem ver a desigualdade no tratamento dado, inclusive, aos processos, aquilo que a gente chama de remediação. [...] Mas por quê que só um negro [foi...] teve um tratamento adequado? E teve as suas reivindicações atendidas? Ele mesmo diz, ele mesmo diz: porque ele foi cooptado pela Renova, porque ele, como é que é? [Pessoa da assembleia diz: "Ele foi comprado"] Ele foi comprado, é? Então, aí, as pessoas sabem. Eu não vou falar nomes. [Eu...] Vocês sabem que é verdade, porque, inclusive, foi alguém que trabalhava contra os outros negros e os outros atingidos e aí, assim, ele conseguiu privilégios. [Aquilo que nos...]. Aliás, [a gente chama das...] é o capataz, não é? [O cara que serve o...]. É o cara negro, capitão do mato, que serve os senhores, torturando, inclusive, os seus iguais. Agora, gente, [o racismo, o racismo é...] o racismo é algo tão extraordinariamente eficiente, que eu me lembro de algumas pessoas que moram no Centro reclamando, reclamando, que eles tinham sido atingidos: 'Ah, o pessoal lá no morro não foi', por quê? Porque no morro moravam [os... os...] os negros, moravam os pobres, as mães solteiras, as senhoras mais velhas etc. Só que, qual foi o nosso espanto, quando nós vimos algo que na Engenharia nós chamamos de necroengenharia. Necroengenharia é a engenharia da morte, é a engenharia para a morte. [...] Ai começamos a ouvir gente falar assim: 'Ah, aqui num tinha lama, mas a lama foi levada pra cima do morro'. [...] Eu nunca vi alguém carregar a lama do centro da cidade pras áreas periféricas, a não ser por prática de racismo tecnológico! A não ser por práticas racistas! [Assembleia reage em concordância, aplaudindo]. Agora eu quero que vocês me digam qual é a lógica, qual é a lógica, [qual é o s...]. Gente, o quê que tem na cabeça do ser humano que usa a tecnologia pra fazer uma coisa dessas? Cá entre nós! Não dá vergonha, minha querida colega Tatiana, de pertencer a uma instituição onde alguns dos nossos colegas, que participaram dessa coisa abominável: distribuir, inclusive, distribuir, inclusive, essa lama que carreava rejeitos! E por último, eu vou só dizer o seguinte: há um processo terrível em relação às mulheres!" [sic passim]".

can be classified as another category, it is the crime of racism, which is non-bailable, and it needs to be punished for that [...] And this is nothing new, especially coming from large companies, which hold great wealth, which own capital and have been violating poor people and Black people in the regions that were affected by the dams. [...] So, ee... if Black people do not die from a bullet, they die from neglect, they die from the lack of public policies [...]" [sic passim] (MPF, 2020, p. 53, emphasis added, free translation)21.

A victim self-identified as Black, Vera Lúcia Aleixo Silva states that she had not received a response or support from the FR until the time of the hearing, completing four years of lack of assistance at the time of her report. She emphasizes that she is Black and poor, implying that this is a case of racism. She also claims that discrimination is related to social class, stating that the wealthier victims usually receive better compensation, while the poor are completely abandoned, left to their own devices.

> Mrs. Vera Lúcia Aleixo Silva (Victim/Self-identified as Black): "[...]. I came back, guys [...] When we arrived at the headquarters, they said [that...] that we would be demanding, so that Renova would recognize all of us who were affected. Four years without a response [...] I am proud of my color: Black! And I am also proud of being poor, but the poor also achieve their conquest [...]. While Renova is doing work for the rich who have a lot of money, sixteen kilometers! And he, who, in twenty steps, arrives at his house and needs help, he needs a card, he needs to be recognized as affected, he needs to be served by the health department because he suffers from cancer, Renova doesn't go there [serv... Renov... The...] to serve him. So, we are connecting the facts. We are illiterate, but we can see! We are poor, but we also have the same dignity as the rich [...]" [sic passim] (MPF, 2020, p. 60, emphasis added, free translation)<sup>22</sup>.

<sup>21</sup> In the original: "Caíque Belchior (Representante do Centro de Convivência Negra da UFMG): [...]. Tá muito claro de que o que a Renova tá fazendo, o que a Vale e a Samarco tão fazendo é um crime inafiançável, que é o crime de racismo. É, não é injúria racial, que pode ser colocada como outra categoria, é o crime de racismo, inafiançável, e que ela precisa ser punida diante disso [...] E isso não é uma novidade, ainda mais vindo de grandes empresas, que detêm grandes riquezas, que são donos do capital e que têm violentado pessoas pobres e pessoas negras das regiões que foram atingidas pelas barragens. [...] Então, é... se o povo negro, ele não morre pela bala do revólver, ele morre pelo descaso, ele morre pela falta de políticas públicas [...]".

<sup>22</sup> In the original: "Dona Vera Lúcia Aleixo Silva (Vítima/ Autodefine-se como negra): '[...]. Voltei, gente [...] Quando a gente chegou na matriz que falava [que...] que a gente estaria reivindicando, para que se a Renova reconhecesse a todos nós atingido. Quatro anos sem ter resposta [...] eu tenho orgulho da minha cor: negra! E tenho orgulho também de ser pobre, mas o pobre também ele chega na sua conquista [...]. Enquanto a Renova fica fazendo trabalho pros ricos que tem muito dinheiro, dezesseis quilômetros! E ele que, com vinte passos, chega na casa dele e ele precisa de ajuda, ele precisa de cartão, ele precisa de ser reconhecido como atingido, ele precisa de ser tratado pela saúde, que manifestou um câncer nele, a Renova num vai lá [aten... Á Renov... A...] atender ele não. Então, isso, a gente vai ligando os fato. A gente é analfabeto, mas a gente enxerga! A gente é pobre, mas a gente também tem a mesma dignidade do rico [...]' [sic passim]".

A victim, Aída Anacleto, who is advisor to federal deputy Rogério Correa and state deputy Beatriz Cerqueira, and president of the Mariana Lino de Sant'Ana Racial Equality Council, highlights the local Black history. She states that Black people worked in an exploitative way for the State development, specifically in mining, and that they are currently paying for a crime that should not have happened, and cites reports.

Aída Anacleto (Victim/Advisor to Federal Deputy Rogério Correa and State Deputy Beatriz Cerqueira/President of the Mariana Racial Equality Council): "[...]. So, just imagine our bodies, Black bodies, Black bodies that have been carrying this country's mess for 500 years, right? And then we were exploited before, in mining, and now they come with greed, right? The power of these mining companies [...] we are paying for a crime that should not have happened. Because, on October 21, 2013, they knew! They knew because there is a report that proves it. [...] Renova seems to be taking over our territories [...]" [sic passim] (MPF, 2020, p. 64, emphasis added, free translation)<sup>23</sup>.

Clever, a collaborator of the State Secretariat for Social Development and Human Rights and a collaborator of the Coordination of Policies and Promotion of Racial Equality, argues that the reported cases outline institutional racism, which constitutes a crime. In his statement, he suggests the creation of a plan to combat racism, including training FR collaborators in the subject.

Clever (Collaborator of the State Secretariat for Social Development [and] Human Rights/Coordination of Policies and Promotion of Racial Equality): "[...] It is a crime of racism and institutional racism. Treating people unequally, right? People because of their skin color. And that is a crime. [So... ee...] I suggest it, right? I suggest the Renova staff to draw up a plan to combat racism, so that we can also train Renova employees, respecting appreciation of ethnic-racial diversity that is being discussed here [...]. These people have been suffering for four years, four years. And they are Black people! Why treat them unequally? [...]" [sic passim] (MPF, 2020, p. 69, emphasis added, free translation)<sup>24</sup>.

<sup>23</sup> In the original: "Aída Anacleto (Victim/Advisor to Federal Deputy Rogério Correa and State Deputy Beatriz Cerqueira/President of the Mariana Racial Equality Council): '[...]. So, just imagine our bodies, Black bodies, Black bodies that have been carrying this country's mess for 500 years, right? And then we were exploited before, in mining, and now they come with greed, right? The power of these mining companies [...] we are paying for a crime that should not have happened. Because, on October 21, 2013, they knew! They knew because there is a report that proves it. [...] Renova seems to be taking over our territories [...]' [sic passim]".

<sup>24</sup> In the original: "Clever (Colaborador da Secretaria de Estado de Desenvolvimento Social [e] Direitos Humanos/ Coordenadoria de Políticas e Promoção da Igualdade Racial): [...] Que é crime de racismo e racismo institucional. Tratar de forma desigual, né? As pessoas por causa de sua cor. E isso é um crime. [Então... é...] Eu proponho, né? Ao pessoal da Renova, a gente traçar um plano de enfrentamento ao racismo, de forma que venha também fazer a capacitação dos próprios servidores da Renova, por respeito à valorização da diversidade étnico-racial que está aqui colocada [...]. São quatro anos, quatro anos que essas pessoas estão sofrendo. E são pessoas negras! Por que tratar de forma desigual? [...]".

Verônica Viana, a lawyer for the State Association for Environmental and Social Defense, states that the reports demonstrate cases of racism, segregation, dehumanization, and systematic violence on the part of the FR. She summarizes by pointing out that this is violence and institutional disrespect for human rights. She emphasizes that such cases of racism often go unseen in Brazil, questioning, for example, why the dam was installed in a region historically known for its social vulnerability. From this perspective, Verônica points to a violent racial segregation that has always existed and that has been deepened by mining companies, using the term "murdering people" to describe it. She emphasizes that these cases represent a reproduction of the historical dehumanization that racism has brought to Brazil, various crimes that need to be investigated.

> Verônica Viana (lawyer for the State Association for Environmental and Social Defense): "[...] those affected today showed a scenario of racism, segregation, dehumanization, and systematic violence that the Renova Foundation has supported in the territories. And we need to understand that all the points raised here reveal the same process, which is an institutional process of violence and disrespect for Human Rights, right? And this is important, because in Brazil today we understand that we live in a racist country, but it is a racist country without racists. We cannot identify racism in practice and its perpetrators [...]. And then we also understand that the dam was there because it was a [dam... it was...] it was in a region of social vulnerability, because that is the mining project, right? And then, in this sense, [ee] the Renova Foundation, and this is what we need to say, it creates a habitus, it creates a place, a place of violence. And then, through its policies, its instruments, it reinforces and creates [a... a...] a racial segregation that already existed in a very violent way, but that today is deepened and has been murdering people, right? And this needs to be investigated. [...]. The Renova Foundation wants to give reparation without people, without popular participation and we see the result here every day: it is illness, it is violence, it is depression, it is humiliation and the reproduction of the historical dehumanization that racism has presented to our people. This is what the Renova Foundation has done [...]" [sic passim] (MPF, 2020, p. 74, emphasis added, free translation)<sup>25</sup>.

<sup>25</sup> In the original: "Verônica Viana (advogada da Associação Estadual de Defesa Ambiental e Social): [...] os atingidos, hoje, eles mostraram um cenário do racismo, da segregação, da desumanização, da violência sistemática que a Fundação Renova tem amparado nos territórios. E aí a gente precisa entender que todos os pontos levantados aqui, eles revelam um mesmo processo, que é um processo institucional de violência e desrespeito dos Direitos Humanos, né? E isso é importante, porque no Brasil, hoje, a gente tem um entendimento que a gente vive num país racista, mas é um país racista sem racistas. A gente não consegue identificar o racismo na prática e seus executores [...]. E aí, a gente entende, inclusive, que a barragem estava lá, porque era uma [barra... era...] tava em uma região de vulnerabilidade social, porque esse é o projeto da mineração, né? E aí, nesse sentido, [é...] a Fundação Renova, e é isso que a gente precisa colocar, ela cria um habitus, ela cria um lugar, um lugar de violência. E aí, desde as suas políticas, de seus instrumentos, ela reforça e ela cria [uma... um...] uma segregação racial que já existia de forma muito violenta, mas que hoje ela tá aprofundada e ela tem assassinado as pessoas, né? E isso precisa ser investigado. [...]. A Fundação Renova quer construir uma reparação sem povo, sem participação

Simone Silva, an activist victim and active member of the Affected Committee, the Health Collective and *A Sirene* newspaper, emphasizes that the majority of victims in Barreto, for example, are Black and remnants of *quilombola* communities. She asks why they are not being served by the FR, implying that it is racism against Black people, the poor, and activists.

"[...] just remember that the majority of people who live in Barreto are Black, right, guys? Remember that there are Quilombo remnants, right? [Assembly expresses affirmatively, in agreement] Yes, let's not forget these, these are priorities. Why is there no meeting in Barreto? Why doesn't Renova serve Barreto? Don't forget to mention that it is because the majority of people who live there are Black. Don't forget that. Our role here today is to demonstrate the racism of the Renova Foundation against Black people, against people, right? Activists. So, another thing, with regard to activism: yes, I am an activist! [...] Regarding the persecution of activists, Vale calls people's homes, here in Barra Longa. And most people sometimes don't understand what the process is [what...] when Vale calls: 'Who is the leader in your city?'. It is true, isn't? The Assembly reacts in agreement] 'Who is the person leading the fight?' And, most of the time, the people here don't know that they are [look...] looking for people to persecute [...] I have been affected by mining, by Vale, Samarco, since I was in my mother's womb. I wasn't even born when I was affected for the first time, by Samarco's first pipeline. I have been affected for 42 years, right? [...] So, Renova Foundation, take my message to Vale, to Samarco, to BHP: I am an activist, I will continue to be an activist, my rights will come through my struggle, not because I sold out. [Applause and shouts from the assembly] Not because I sold out! I am not a slave catcher! [...] I said I would talk, right? [It's just that...] When the Renova Foundation was created, it was created with the intention of being a good thing. The same with the Golden Law, wasn't it? They said it was a good thing, didn't they? 'Hey, let's free the slaves, poor slaves', right, guys? The Renova Foundation is the same Golden Law! And here in Barra Longa, Dr. Helder, you don't know, the Renova Foundation now puts padlocks on the doors, to prevent slaves from entering the houses of the sugar mill owners, right? The PIM here is locked with a padlock so that people don't come in, right?". [Assembly reacts indignantly, in agreement] [...]" [sic passim] (author's emphasis) (MPF, 2020, p. 75, emphasis added, free translation).26,27

popular e o resultado a gente vê diariamente aqui em território: é adoecimento, é violência, é depressão, é humilhação e a reprodução da desumanização histórica que o racismo tem colocado pro nosso povo. É isso que a Fundação Renova tem feito [...]' [sic passim]".

<sup>26</sup> Considering the density of the narration, it was understood that breaking it down and reducing it even further would result in a loss of context and understanding. This justifies the quote length.

<sup>27</sup> In the original: "[...] só lembrar que a maioria que das pessoas que mora em Barreto são negras, né, gente? Lembrar que lá é remanescente de Quilombo, né? [Assembleia se expressa afirmativamente, em concordância] É, não vamo esquecer essas, essas prioridade não. Por que que Barreto não tem reunião? Por que que Renova não atende Barreto? Não vão esquecer de citar que é porque a maioria das pessoas que mora lá são negras. Não vão esquecer isso. O papel noso aqui hoje é demonstrar o racismo da Fundação Renova contra os negros, as pessoas, né? Militantes. Então, outra coisa, sobre a militância: sou militante sim! [...] Sobre as perseguições a militantes, a Vale liga nas casa das pessoas, aqui em Barra Longa. E a maioria das pessoas as vezes não entende qual que é o processo [o que que...] quando a Vale liga: 'Quem

The affirmation is that the FR seeks to know the militant leaders' names, which sounds like persecution. Simone Silva criticizes what defines someone as a victim, using the term affected to do so. Likewise, in her statement, she uses historical terms related to the era of slavery in Brazil, such as: slave catcher, Golden Law, padlocks on the doors, slave, and sugar mill owners.

Based on the accounts, several complaints related to environmental racism and alleged crimes committed by the FR can be seen. Victims from several regions around Mariana's outskirts appeared and questioned the fact that the municipality had achieved legal victories for reparations from the mining companies, while their regions had not, with the majority still being invisible and not served by the mining companies.

#### Conclusion

The Fundão dam rupture is seen as an event of many disasters, whose strategic use of attributed information has been exploiting not only the vulnerability of each victimized community since before the event occurred, but also the vulnerability that is seen in the ability to attribute meaning, significance and definition, not only by the victims of each disaster, but also by the population, the Justice system, the media, everyone.

The incentive for the lack of cohesion and coherence in the definition and understanding of the event justifies, for example, the fact that several of the many disasters caused by the event are still named almost unanimously as the "Mariana disaster", when, in fact, it should include the many other names of additional disasters, thus honoring all the places affected by the event that have been the scene of so many cases of environmental racism, various types of violence, discrimination, and environmental injustice that have repeatedly occurred.

que é a liderança na sua cidade ai?'. É ou não é gente? Assembleia reage em concordância] 'Quem que é a pessoa que fica à frente da luta? E, na maioria das vezes, o povo aqui não sabe que eles ficam [proc...] procurando pra perseguir [...] Eu sou atingida pela mineração, pela Vale, Samarco, desde quando eu estava na barriga da minha mãe. Eu nem tinha nascido quando eu fui atingida pela primeira vez, pelo primeiro mineroduto da Samarco. Então lá vai-se 42 anos de ser atingida, ne? [...] Então, Fundação Renova, leve meu o recado pra Vale, pra Samarco, pra BHP: sou militante, vou continuar militante, meu direito vai vir, pela minha luta, não por eu me vender. [Aplausos e gritos da assembleia] Não por eu me vender! Não sou capitão do mato! [...] eu falei que ia falar, né? [É que...] Quando a Fundação Renova foi criada, ela foi criada no intuito de ser uma coisa boa. A Lei Áurea também, num foi? Dizia que era uma coisa boa, num disseram? 'Opa, vamo libertar os escravos, coitado dos escravo', né, gente? A Fundação Renova é a mesma Lei Áurea! E aqui em Barra Longa, Dr. Helder, o senhor num sabe, a Fundação Renova agora póe cadeado nas porta, pra evitar que os escravo entre lá na casa dos senhores do Engenho, tá bom? O PIM aqui é trancado com cadeado pra o povo não entrar, tá bom?".

This absurd context allows for an increase in situations of environmental racism, which have been confirmed since the choice of the location for the construction of the Fundão dam. A truly absurd scenario of segregation, dehumanization, and systematic violence. Notably, classic characteristics of the progressive neo-extractivism operations of Gudynas (2012). According to the reports presented in this study, those who suffer the most from persecution, threats, violence, neglect, and abandonment are the victims who are cause activists and Black people, the latter being the predominant population in the area.

A clear parallel is identified between the progressive neo-extractivism economic model, visibly in full operation in the region, and the discussions related to environmental racism. The question is why potentially degrading activities are developed in this specific territory, where the majority of the population is composed of Black people. Could this be yet another sacrifice zone, with Black bodies made invisible in favor of economic growth? The question is also why disaster prevention policies have not been implemented or have been so inefficient that they have not even guaranteed an evacuation order. In short, more than 300 years later, it was the mining companies that were once again responsible for the collapse of the region.

Therefore, it can be concluded that environmental racism exists. Minorities have been dehumanized by the abandonment of their basic human rights for almost a decade, and what Zhouri *et al* (2016) call social vulnerability and the measurement of social suffering have been verified. Once again, the dehumanization of human beings. It is practically a metaphor for the era of the great voyages of discovery, which crossed unknown seas, "conquering" already inhabited territories by force and reducing the locals to the most humiliating conditions of survival.

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### Authors' participation

Andreza Áparecida Franco Câmara was responsible for proposing the research problem, text review and final approval. Ludmilla Pereira Massoto Laranjeiras was responsible for defining the methodology, bibliographical research, text review and final approval. Both authors contributed to the development of discussions on the topics covered and to the presentation of the final considerations.

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