THE PROMOTION OF THE SOCIO-ENVIRONMENTAL STATE AND ENVIRONMENTAL JUSTICE IN THE MINING ACTIVITIES CHAMBER OF MINAS GERAIS

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ABSTRACT

Objective: the objective of this article is to examine whether, and how, the foundations of the Socio-environmental State are concretized in the course of the decision-making process regarding the granting of environmental licenses for iron extraction activities in Minas Gerais.

Theoretical framework: The research is based primarily on studies of the development of the Socio-environmental State, on the literature on environmental justice, and on environmental licensing.

Method: the research is qualitative in nature, descriptive, and documentary research was carried out, in addition to the strategy of content analysis.

Results and conclusion: the analyses indicate the ineffectiveness of environmental licensing as an instrument of State regulatory policy for environmental protection, a fact that compromises the effectiveness of the Socio-environmental State.

Implications of the research: based on a critical analysis of the institutional arrangement of the licensing agency under study, we highlight the need to improve the current licensing model in Minas Gerais in order to ensure the effectiveness of environmental protection, which is configured as a state duty, as a way to ensure the prevalence of the principles that guide the Socio-environmental State.

Originality/value: the study intends to contribute to the improvement of environmental governance with regard to environmental licensing, opposing the claims for greater operational flexibility of the instrument. It is intended to show how the institutional arrangement that structures the licensing body in the current model in Minas Gerais does not follow the strategy of promoting the intrinsic precepts of the Socio-environmental State, corroborating the prevalence of environmental injustices in the scope of mining exploration in the state.

Keywords: Socioenvironmental State, Environmental Injustice, Licensing, Mining.

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Método: a pesquisa é de natureza qualitativa, de cunho descritivo, tendo sido realizada pesquisa documental, além da estratégia de análise de conteúdo.

Resultados e conclusão: as análises indicam a inefetividade do licenciamento ambiental como instrumento de política regulatória do Estado para proteção ambiental, fato que compromete a observância dos preceitos do Estado Socioambiental.

Implicações da pesquisa: a partir de uma análise crítica do arranjo institucional do órgão licenciador objeto de estudo ressalta-se a necessidade de aprimoramento do modelo de licenciamento vigente em Minas Gerais para a efetividade da tutela ambiental que se configura como dever estatal, como forma de garantir a prevalência dos princípios que norteiam o Estado Socioambiental.

Originalidade/valor: o estudo pretende contribuir para o aprimoramento da governança ambiental, no tocante ao licenciamento ambiental, contrapondo-se a reivindicações por maior flexibilização operacional do instrumento. Pretende-se evidenciar como o arranjo institucional que estrutura o órgão licenciador no modelo vigente em Minas Gerais não segue a estratégia de promoção dos preceitos intrínsecos ao Estado Socioambiental, corroborando para a prevalência de injustiças ambientais no âmbito da exploração minerária no estado.


1 INTRODUCTION

The history of the state of Minas Gerais is strongly linked to the exploitation of mineral resources, which is a structuring element in its socioeconomic development process. Nevertheless, since the beginning of the mining production it is possible to identify the prevalence of predatory actions, environmental aggressions and inequalities in the distribution of the riches produced (Silva, 1995), facts which give rise to innumerable conflicts.

Among the extractive activities exploited in the state is iron ore. According to the Brazilian Mineral Yearbook of 2020, prepared by the National Mining Agency (ANM), in 2019 Minas Gerais was responsible for the gross production of 311 million tons of the mineral, reaching commercialized values of around R$ 44.5 billion - data that assure the second position in the ranking of sectorial producers in the national scenario.

According to Gazzinelli (2021), in the last 30 to 40 years there has been a great intensification of mining production in Minas Gerais, as well as the installation of ore tailings dams, notably in the Iron Quadrangle and Aquifer region. Despite the data revealing the dynamism of the iron extraction production in the state, such protagonism is not unaccompanied by important impacts resulting from the activity. The productive and technological advances achieved by mining have not been followed by the solution of the problems caused by the growing and intense sectorial activity. The current exploitation model is associated, in particular, with environmental and social problems experienced by existing communities in places that host mining enterprises and that, therefore, bear, disproportionately, the deleterious impacts of the activity (Fontoura, Naves, Teodósio & Gomes, 2019).

The relentless pursuit of maximizing profits by mining enterprises, the finite nature of mineral resources, the degradation generated, and the unequal distribution of the wealth obtained constitute an important set of reasons for the continued intensification of environmental conflicts arising from this economic activity. This exploratory model provides support for the development of theories that deal with environmental inequality (Acselrad, 2010), based on the concentration of negative impacts of natural resource exploitation enterprises on a specific group of individuals who experience, or see deepening, a process of
social vulnerability. Moreover, it is imperative to mention that the so-called mineral extractivism-export model (Gonçalves, 2017, p. 38), very present in Latin America, is conceived by the literature as a driver of the strengthening of "strategies of control of territories and accumulation by dispossession," a set of factors that give rise to serious conflicts of a socio-environmental nature. Thus, strong dilemmas between economic development and environmental preservation become evident, and it is up to the State to guarantee concrete and appropriate means for the protection of environmental resources, sustainable development and the enjoyment of a balanced environment, which should be achieved through efficient regulation of mining activities. From this perspective, the necessary predominance of public interest in the management of environmental resources is justified by the fundamental duty imposed on the State to safeguard the satisfaction of collective needs. It is from these premises that the following research question is formulated: does environmental licensing for iron ore mining activities constitute an environmental management instrument capable of preserving fundamental rights and promoting environmental justice?

We propose to investigate, through the analysis of the minutes of the Chamber of Mining Activities of the State Council of Environmental Policy of Minas Gerais (CMI/COPAM), if the environmental licensing process for mining activities is effective in fulfilling the state duty of environmental protection, as well as if it has, or not, the ability to promote environmental justice. As a theoretical contribution, we highlight the explanatory reach demonstrated by the concept of environmental justice in the analysis of environmental impacts and conflicts associated with extractive economic activities. As a practical contribution, the research has the ability to point out what is the understanding and the positioning of decision-makers, especially state agents, about the doctrine and the values of an environmentalist matrix.

In this context, in order to present the foundations that impose environmental protection as a state duty, it is initially about the Socio-environmental State, approaching the development process of constitutionalism and the recognition of the right to the environment as a human right representative of human dignity, which flows into the environmental licensing process.

Next, the theory of environmental justice is addressed, based on the idea that the impacts resulting from activities that exploit natural resources should be equally borne by the community, without class or ethnic distinctions, which in practice is not the case.

Having discussed the above themes, the next section presents the methodology adopted for the empirical analysis developed through qualitative research, based on the content analysis of the manifestations expressed by the political, social, and economic actors in the deliberation sessions of CMI/COPAM.

Finally, the results and conclusions of the study are presented.

2 THE SOCIO-ENVIRONMENTAL STATE: THE HUMAN RIGHT TO THE ENVIRONMENT AND THE LICENSING PROCESS

The recognition of the enjoyment of an adequate environment as a fundamental right, of diffuse and collective character, derives from the adoption of the precept of human dignity as a paradigm and foundation of contemporary constitutionalism (Ferrajoli, 2002), a fact that also drives the development of the so-called Socio-environmental State.

According to Canotilho (1999), this State model presupposes, first of all, the institution of a Rule of Law, which is responsible for adopting measures aimed at preserving the environment, representing the public duty of environmental protection, either through positive or negative actions. The recognition of the need for the attribution of state duties to protect the environment is related to the phenomenon of the constitutionalization of environmental issues, initially at the international level.

Constitutionalism, understood by Dallari (2013, p. 349) as a "social movement", presents itself as a process in constant evolution throughout the history of civilizations,
characterized by having its own characteristic features and corresponding to the fundamental and guiding precepts of the political and legal organization of a given society. Considering the fact that society is in constant mutation, each of the modern constitutional movements - English, North American and French - is endowed with intrinsic peculiarities, although it is possible to identify the existence of points of connection between them, concerning the purpose of limiting political power, as well as the claim for the implementation of a rule of law, or in other words, the supremacy of laws (Branco, 2020).

The emergence of the Constitutional State, enshrined by the Rule of Law, founded on the thesis of supremacy of the constitutional rule, in the need for legal limitation of Powers, stems, as well mentioned by Sarlet and Mitidieri (2020), from a trajectory that was being expanded throughout the nineteenth century, and sophisticated from the post-World War II period. It is worth noting that this State model is characterized by encompassing specific types, such as the "Liberal Constitutional State (Liberal Rule of Law), the Social Constitutional State (the Social Rule of Law) and the Democratic Rule of Law". As sustained by the same jurists, the democratic State of Law "assumes the feature of a State that is also Social and Environmental, which may, through a formula-synthesis, be designated as a Socioenvironmental State, or even a Socioenvironmental and Democratic State of Law" (p. 65).

Thus, it is with the third wave of human rights, verified in the years after World War II, that the environmental issue is recognized as a fundamental human right, as Mondaini (2020, p. 150) states that "what is at stake is the very ability of the Earth to stay alive, neutralizing the exterminating intentions implemented by men themselves. Representing a third dimension right, the environment has collective ownership, corresponding to a trans-individual and supranational right, a fact that imposes the attribution of duties and responsibilities to different actors - Public Power and the community - which are responsible for protecting and promoting the right to a balanced environment, in appreciation, primarily, of the human dignity principle, as Fensterseifer (2008) points out.

The attribution of the status of human right to environmental issues constitutes a primordial advance for the promotion of its protection, as well as configuring the recognition of the environment as a human right, of universal and collective character, as a presupposition for the guarantee of life and that imposes a state action in favor of its preservation. The fact that such conception is the fruit of a process built over centuries, while giving it solidity - justifying the principle of the prohibition of retrocession, so characteristic of the human rights doctrine - does not prevent, however, that it is continuously in transformation, after all the evolution process remains in continuous movement, as Bobbio (2004) points out.

It was not without reason that the impetus for the world's awakening to the emergence of problems associated with environmental degradation and its impacts coincides with a historical moment of advancement of the capitalist production model, the so-called "Great Acceleration", which begins after the end of World War II, when the "footprints" of man on Earth become more evident (Sarlet, 2014).

Awareness of the cause and effect relationship established between human action - aimed at continuous economic development, with increased production and consumption - and environmental degradation begins to gain greater attention on the international scene from the 1960s on, especially in the United States, a pioneer country in terms of modern environmental movements. This period marks the beginning of the consolidation of "ecological values", as well as the expansion of social groups organized in favor of the environmental struggle, which stressed the importance of re-signifying the relationship between Man and Nature, with the need to impose limits on the expansion of economic production.

Domestically, environmental protection is also configured as a fundamental value and principle of the contemporary State, which must permeate all the current normative framework, as well as the public or private actions that have the ability to have repercussions on the environment. These precepts are consolidated in the Federal Constitution of 1988 (CF/1988),
notably in articles 170, item VI and 225, which constitute, from the standpoint of constitutionalists, a new legal framework of environmental matrix in the country (Martini, Souza-Lima, 2013), in view of the relevance of the recognition of the right to the environment as a fundamental right, as well as the possibility of control over free enterprise in favor of environmental protection.

Regarding the aforementioned control over free enterprise, state action is required for the implementation of the economic activity discipline, in order to ensure environmental preservation, which is done through planning and management actions that are provided for in the National Environmental Policy (PNMA) - Law No. 6938 of 1981 -, highlighting, among the various instruments listed in its Article 9, the environmental licensing of potentially polluting activities, as is the case of mining.

Considering the peculiarities that mark the environment - collective ownership, limitation, scarcity and non-renewal of all natural resources - the environmental licensing presents itself as an appropriate instrument for regulating the exploitation of natural resources, given its "role of instrumentalizing the mediation of the development of socioeconomic activities and the prevention of their impacts on the environment" (Silva, Carneiro and Brasil, 2021). The notion of mediation conferred to the licensing goes back to the fact that the procedure includes demands from different segments of society, representing economic and social groups, as well as the government itself. The gathering of such actors, with different interests and levels of political and economic power, indicates the high potential for conflict that marks the processes of deliberation on the granting of environmental licenses, especially with regard to mining activities, in the terms proposed in this study.

In this scenario, in the scope of the state of Minas Gerais, the debates over the granting of environmental licenses for mining enterprises are held in CMI/COPAM. Reflecting the criticism directed to licensing, whether for an alleged bureaucratic excess that would compromise economic activity or for its ineffectiveness that would undermine environmental protection (Silva, 2017), there is a movement to relax the rules of the procedure, which Bermann (2014) calls "the deconstruction process of environmental licensing, representative of a political strategy aimed at promoting developmental projects that would configure, in the terms proposed by Zhouri (2020), examples of a so-called "slow violence", consistent with forms of precariousness of environmental management instruments capable of promoting environmental injustices.

3 ENVIRONMENTAL JUSTICE: FUNDAMENTALS AND OBSTACLES

It is a fact that the process of man's transformation of the environment has occurred since the dawn of humanity, as the survival of all has always depended on the use of natural resources. However, with the scientific revolution, starting in the 17th century, man's "footprints" became more easily identifiable, as the environmental impacts of human action were more intense and increasingly demanded more effort from Nature for their restoration. With the Industrial Revolution and the institution of a more intensive production model of natural resource use, as well as the adoption of new consumption habits, the situation becomes even more worrying, as advances and technological innovations make us believe that there are no limits to the ability of creation and human domination, and that the environment should provide the necessary resources for the realization of productive projects, which would have the ability, including the ability to solve the problems arising from the exploitation. Such a position resulted in the predominance of reasoning that places man as a superior being and nature as an instrument at the disposal of human action.

Such utilitarian view is well pointed out by Jean Dorst (quoted by Sarlet and Fensterseifer; 2014), when mentioning that man, in his desire for control through technology, tends to be interested only in what has the potential to generate income, as a form of "machine
worship”. This conception reveals the absence, or perhaps the disregard, of an ecological ethic capable of indicating limits and restrictions to the predatory action implemented by man. Moreover, the non-recognition of the essential value of nature constitutes a philosophical position that is antagonistic to the conservative thesis, which propounded its divinity and the need to develop an ecological ethic, of a non-utilitarian nature.

Contrary to the utilitarian perception of nature, which only recognizes as integral elements of the environment the material resources, which should be considered from the perspective of ensuring their preservation in sufficient quantities to the continuity of economic activities of large-scale exploitation, regardless of the purposes to which it is dedicated, and claims that the effects of such exploitation will be "democratically" borne by society in general (Acselrad, 2010), there is the theory of environmental justice.

Formulated from a cultural conception of nature (Acselrad, ibid.), the notion of environmental justice is characterized by the attribution of "sociocultural qualities" to the environment, in the face of the recognition that it carries various meanings, associated with the society that relates to it, and also in the questions about the justifying ends of its exploitation. Another important foundation of the theory of social justice consists in the rejection of arguments about the democratization of environmental impacts for all of society, since it holds that each community establishes its own relations with the environment - based on its cultures, ways of life, economic situation - and that the effects of exploitation and degradation are specific, corresponding to the level of exposure that the subjects have in relation to the risks.

When dealing with environmental injustice, the issue of environmental impact distribution, or "the distribution of risks of industrial production" (Zhouri, 2008), becomes very important, as it reveals the inequality that permeates the processes of domination of nature, territories, and individuals, in favor of economic interests. Hardin (cited by Dias, 2015), in the same vein, points out that "when the environment, which is a common good, is exploited, seeking private benefit, environmental impacts can be caused that negatively affect the welfare of other people who have no relationship with those who generate them".

Following such reasoning, the argument that large industrial production projects, notably the "space homogenizers" (Zhouri, 2008), import a double form of injustice is coherent. Besides the fact that the communities directly affected by the impacts are not directly benefited by the positive results of the activity, they still bear the negative effects, which are sometimes concentrated in remote areas of major centers, becoming invisible to the real recipients of the so-called progress promoted.

Complementary to the concept of environmental injustice is the development - from complaints and claims led by black movements in the United States in the 1970s - of the theory of environmental racism, based on the recognition of the adoption of racial criteria for the determination of social groups to be subjected to the risks of industrial production, which, according to Herculano (2008):

It 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 environmental inequality and injustice: that which falls upon its ethnic groups, as well as upon every group of so-called traditional populations.

The pertinence of the aforementioned conceptualization of environmental racism can be verified, specifically in Brazil, by the recognition, among the victims of unjust actions, of the same ethnic profile, notably with respect to the black population. It is a fact that the magnitude of inequalities that plague the country, as argued by Herculano (2008), makes it difficult to recognize the racial criterion as determinant for the actions. Pacheco and Faustino (2013) argue that the analysis of environmental injustice in Brazil should go through the issue of racial
discrimination to which the black population has been subjected since the colonial period. This proposal stems from the understanding that the racial issue in the country still conditions and determines social structures, establishing a hierarchy between whites and non-whites, which places the black population (black and brown) at socially inferior levels, a fact that makes the full exercise of fundamental rights, social mobility, free expression and cultural preservation unfeasible.

In addition to the disproportionate distribution of the impacts of degradation, the environmental justice theory also addresses how the lack of political-institutional representation of vulnerable social groups constitutes yet another form of offense against environmental rights. The idea is that the lack of political and economic power and influence of a portion of society - indigenous populations, the poor, blacks, traditional communities, and quilombolas - means that the decision making processes on the approval and/or allocation of projects contrary to the well-being of these groups, which will be directly affected, take place without them having a real possibility of participating in the deliberation, to the extent that the competent bodies are not integrated by their representatives, a fact that configures another type of violence, marked by the democratic deficit of the institutions.

The lack of institutional representation of the marginalized population is determinant for their submission to decisions made by those who cannot bear their concrete effects. Thus, injustice is also materialized by the lack of "conditions of access to environmental protection" (Steinbrenner et al; 2020), which favors the perpetuation of the underprivileged social position of such groups, or, as Pacheco (2013, p. 91) points out, "define the directions of economic development in the country."

Thus, the analysis of the socio-environmental state imposes not only reflections about its instrumentalization as a rhetoric of legitimation of environmental exploitation - such as the study of the unequal mode of distribution of environmental impacts - but also points to the necessary consolidation of environmental justice, characterized by the search for equity in the distribution of risks arising from activities that cause environmental impacts, regardless of class or race of the affected individuals (Acselrad, Herculano and Padua, 2004).

Therefore, the peculiar nature that characterizes the legal good "environment" requires that the state regulatory action recognize the impossibility of delegating the duty of preservation to economic agents, given that these, by adopting the rationality logic typical of market dynamics, guide their actions with a view to increasing profits, even if at the expense of increasing violence and environmental injustice. The way in which this practice is carried out can be demonstrated by analyzing the relationship instituted between the productive sector of the iron mining industry, the State, and the communities affected by the activity, as analytically explored in this study.

4 METHODOLOGY

With the focus on identifying if and how the deliberation processes of environmental licenses for mining enterprises have the power to appease or, on the contrary, to corroborate the prevalence of environmental conflicts which give rise to environmental injustice, we opted for a methodology which is configured under a qualitative perspective, of a descriptive and interpretative nature, making use of bibliographic and documental procedures.

Based on the proposal of Minayo (2012), which highlights the importance of, in a qualitative research, consider that the experience and the living of individuals are developed "within the collective history and are contextualized and involved by the culture of the group in which it is inserted", we sought to analyze the way members representing different social segments act in a deliberative environmental body, the CMI/COPAM. It was hoped that, based on this study, it would be possible to obtain a better understanding of how environmental conflicts are configured in the institutional sphere and, furthermore, the strategies used for their
possible solution or, on the contrary, how such conflicts are ignored, with a view to pursuing interests aligned with economic development proposals.

Following the lessons of Yin (2001), the choice of case study as a research strategy was initially due to the analysis of the research question formulated, which is linked to the environmental licensing of iron mining activity and the promotion of environmental (in)justice. This question is characterized as a "how, why" question, revealing a more explanatory and/or descriptive purpose which, therefore, would be more in line with the case study or historical research.

In this sense, it was envisioned that from the analysis of the deliberation process in CMI/COPAM it would be possible to advance in the search for an "in-depth understanding" (Creswell, 2014) of the factors most pondered by its members when granting or not the environmental license. The arguments and values of the decision-makers end up being revealed throughout the positions adopted by them in the various processes submitted for evaluation, providing subsidies for inferences about how the environmental conflicts generated by mining enterprises are perceived and treated in the fruition of the licensing activity.

The document archive used in the research was composed of the public minutes of the deliberation sessions held in the scope of CMI/Copam, when the environmental license was granted.

Given the testimonial nature conferred to the documents, which has the ability to "add the dimension of time to social understanding" (Cellard, 2008), this source proved to be a relevant research tool for the proper collection of data for analysis, because, besides providing access to the real context in which the decision-making process on the object of study is developed, the use of the minutes also proved to be a satisfactory way to meet the criteria of reliability and credibility of the source, since their public character provides security as to their validity, besides the fact that their classification as minutes presupposes the existence of a procedure of submission of the document to the appreciation of the authors of the recorded speeches, which also ensures their veracity. Furthermore, it is important to point out that the minutes that were the object of the analysis are characterized by a writing rich in details of the agents' manifestations, which confers greater security in terms of reliability.

Regarding the volume of data analyzed, all minutes of sessions held by CMI/Copam from the year 2017 were previously surveyed, when they became available on the agency's website, until the year 2021, when the research ends. In that period, 79 sessions of the Chamber were held, and, sequentially, the deliberations related to enterprises of the five largest iron mining companies operating in the State of Minas Gerais were considered, according to Anuário da Mineração 2020 (ANM, 2020) - Vale S.A., CSN-Mineração, Anglo American Minério de Ferro Brasil S.A., Mineração Usiminas S.A. and Vallourec Mineração Ltda. Subsequently, the deliberation processes of interest to these companies that would be located in the region of the Iron Quadrangle were selected, thus culminating in the analysis of enterprises of four of these companies, excluding only Anglo American Minério de Ferro Brasil S.A.

Once the processes were selected, the strategy of content analysis was used, seeking to identify "the values and opinions" that could, according to Henry and Moscovici (1968, cited by Kobashi, 1996, p. 16), reveal the meaning of the manifestations expressed in the fragments of texts. Thus, the intention was exactly to understand the real meaning of the manifestations recorded during the environmental licensing sessions - a context in which the distinct conceptions and values linked to the ideas of environmental preservation are highlighted. Content analysis was conceived as a satisfactory method to achieve answers that are not explicit in the speeches, but that can be identified through a detailed examination, whose result would culminate in the "unveiling" of meanings, in the terms raised by Godoy (1995).

In this way, the manifestations of different agents and actors who manifested themselves during the deliberation sessions were selected. Therefore, the data set is composed of speeches by economic agents, agents representing the State, as well as environmental counselors, who
make up CMI/COPAM, and also members of communities affected by the enterprises subject to licensing.

Based on the excerpts selected, we formulated analysis categories (Laville and Dionne, 1999) that represented themes related to the subject matter of the study, especially the recognition and effectiveness of the guiding principles of the Socio-environmental State, as well as the denunciation of environmental injustice. The categories formulated and their analysis are presented in the following section.

5 THE RECOGNITION OF THE SOCIO-ENVIRONMENTAL STATE AND ENVIRONMENTAL INJUSTICE AT CMI/COPAM

Under the terms of Copam Resolution No. 1,553/2020, the granting of environmental licenses for mining activities in the state of Minas Gerais is the responsibility of CMI/COPAM, an agency linked to the State Secretariat for the Environment and Sustainable Development - Semad, whose composition includes the participation of multiple agents - state, economic, and social. As members of the Public Power, there are the State Secretary of Government - Segov; the State Secretary of Economic Development - Sede; the State Secretary of Labor and Social Development - Sedese; the Minas Gerais Economic Development Company - Codemig; the Brazilian Institute of Environment and Renewable Natural Resources in Minas Gerais - Ibama; and the National Mining Agency - ANM. Among the representatives of the civil society there are councilors appointed by institutions linked to the economic sector, such as the Sindicato da Indústria Mineral do Estado de Minas Gerais - Sindicstra (Minas Gerais Mineral Industry Union); the Federação das Indústrias do Estado de Minas Gerais - Fiemg (Minas Gerais State Industries Federation); the Sociedade Mineira de Engenheiros - SME (Minas Gerais Society of Engineers); and the Associação Brasileira de Engenharia Sanitária e Ambiental - Abes-MG (Brazilian Association of Sanitary and Environmental Engineering). Still in the civil society representative segment, there are two seats for environmental protection entities, such as the Fundação Relictos de Apoio ao Parque do Rio Doce - Relictos; and the Associação para Proteção Ambiental do Vale do Mutuca - Promutuca. It is with this composition, thus, that the licensing agency, subsidized by the single opinion on the environmental study presented by the entrepreneur and issued by analysts from the Superintendence of Priority Projects - Suppri/Semad, appreciates and deliberates on the environmental feasibility of enterprises in the mining sector.

The analysis of the manifestations of the different actors in the course of the deliberation processes developed in CMI/Copam allowed the elaboration of categories marked by the exposure of discourses indicating different logics in dealing with environmental issues, especially with regard to their relationship with economic interests. The manifestations expressed are quite representative of the distinct positions occupied by social, political and economic actors involved in the decision-making arena, who seek the prevalence of their interests, which are not necessarily in line with the effectiveness of the Socio-environmental State, as shown in Chart 1.

Table 1. The recognition of the Socio-Environmental State and environmental injustice at WCC/Copam

<table>
<thead>
<tr>
<th>Analytical Categories</th>
<th>Key Idea</th>
</tr>
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<tbody>
<tr>
<td>Environmental principles of prevention and precaution</td>
<td>It indicates manifestations in favor of reverence and conformation of decisions in line with such environmental premises.</td>
</tr>
<tr>
<td>Sustainability</td>
<td>It points out how the ambiguity of the institute of sustainability presents itself in the deliberation arena of the WCC/COPAM.</td>
</tr>
<tr>
<td>Technological Innovation</td>
<td>It refers to the different purposes that technological innovation can serve in the mining production network.</td>
</tr>
<tr>
<td>Integrated analysis of the undertakings</td>
<td>It indicates the demand from environmental civil society advisors and academics for the implementation of integrated analyses of...</td>
</tr>
</tbody>
</table>
The formulation of this set of categories of analysis stems from the identification of different rationalities on environmental issues, especially on the value assigned to natural resources, depending on the nature of the representation of the decision-maker - state, environmental civil society or linked to the economic sector. Another factor portrayed in the aforementioned chart concerns the different practices that cause injustice, which, whether through commissive or omissive actions, are supported by deficient environmental governance.

5.1 Environmental values of the socio-environmental state and environmental injustice

Given the centrality of the Socioenvironmental State to this research, we sought initially to identify how the normative foundations of such a model of state organization are approached by the members of the WCC/COPAM throughout the voting manifestations, as well as in the debates among the different agents. In this sense, the categories pertaining to the principles of prevention and precaution, sustainability, technological innovation, and integrated analysis of undertakings can be grouped together as they express environmental values relevant to the purposes of a Socio-environmental State. However, the use of institutes so highly valued for environmental protection ends up varying considerably, depending on the group to which the author belongs.

The mention of the environmental principles of precaution and prevention, for example, may present itself as a strategy of contestation, used to counter manifestations against the granting of licenses, after it has been pointed out that a given undertaking does not meet all the legal requirements, especially those related to safety, as highlighted below:

Therefore, there is at least doubt to be overcome. And if there is doubt, the precautionary principle must be applied. How long did this procedure take to be instructed? Isn't this question now going to be overcome? Will there be, it seems to me, a hasty deliberation of an environmental license of such importance and magnitude? There is no ideological action, there is an inspection of the regularity of the licensing procedure. That's all there is to it (Public Prosecutor's Representative. Minutes of the 17th Meeting. Excerpt 1128 to 1174).

Although there is a certain degree of consensus that observance of the precautionary and prevention principles lends legitimacy to decision-making, the conception of the meaning of these premises varies, particularly according to the author of the statement, as noted below:

The precautionary principle, which has been cited, recurrently, in all three appeals, we cannot understand that it is a blank check that does not allow any activity because it has some consequence. All human activities have consequences. It is not a dam that will have more, because it is a dam. All of us bring impacts to the environment. (Director of Procedural Control of Suppri/MG. Minutes of the 12th Meeting. Date: 07/29/2017. Excerpt: 485 to 499).

The different conceptions of the application of the precautionary principle, which are even repeated in relation to other principles and institutes, stem to some extent from the absence of a conclusive concept of the principle, but also from the lack of progress in defining morally acceptable risks related to mining activities in the state of Minas Gerais.

The difficulty in making this principle concrete seems to refer to a political-institutional
choice, since the previous analysis of the undertaking, under this aspect, by SUPRAM’s technicians, must be based on a guideline defined by the managers, in the face of uncertainty. After all, the acceptable risk limit is not a merely technical issue, but a transdisciplinary one, since the limits of the risks deemed admissible must go through the sieve of society, even through its representatives.

It is in this sense that the manifestation of another CMI counselor seems to be aligned when dealing with the position of the State of Minas Gerais in relation to iron extraction activity:

What we saw during the meetings of the Chamber of Mining Activities last year was that neither the State nor the councilors observed - I am not saying all the councilors, they have reservations - the precaution and prevention principles. Our Council was always run over by decisions that had already been taken. And I think that the State, when analyzing the mining issue, has also not followed the precaution and prevention principles (PROMUTUCA Councilor. Minutes of the 41st Meeting - Date: 22/02/2019. Excerpt: 109 to 204).

Thus, we can see that the central issue lies in ethical options, in addition to technical factors, after all, even if there are mitigation and compensation actions, the impacts and damage caused will be imputed to a certain social group, so the definition of the reasonable degree of risk requires more than technical analysis.

Regarding the notion of sustainability, discrepancies of meaning in its application are also identified. The term is already recognized for its ambiguity, since, especially in a capitalist production system, the promotion of economic development often neglects social and environmental aspects.

In the context of WCC/COPAM the controversy about the scope of the term "sustainability" also presents itself.

And I have insisted on this, sustainability is not only the environmental part, there are social and economic ones. If we consider the locational rigidity of mining, it exists there. I have worked in the Amazon for a long time. Why should we choose to work in the Amazon when we could work in a much closer place? The locational rigidity of mining demands it. If there is a proposal to expand, as Francisco mentioned, this is inherent, if I am going to expand, I also have to expand the depletion. I can't expand, and everything stays inside the mining, I have to expand and certainly export this material, I have to remove it from inside (CREA representative Councilor Minutes of the 45th Meeting. Date: 06/28/2019. Excerpt: 976 to 992).

In the passage above, it can be seen that the idea of sustainability is used to highlight the importance of considering the economic aspect, to the extent that locational rigidity is presented as an unquestionable justification for exploiting a given territory. The manifestation thus seeks to inform that the exploitation of mineral resources is determined by factors that are independent of the entrepreneur's choice, and that the economic aspect of the notion of sustainability constitutes an element of legitimacy for exploitation.

It was also possible to identify that the notion of sustainability finds variations of understanding and application, as the following excerpt demonstrates

CSN has a very important sustainable development in our region. The importance of the mining activity in our region, practically without it we couldn't work. Today, in terms of sustainability, at the moment that we are living in the country today, for example, in the municipality of Belo Vale, 30% to 40% of our young people are unemployed. This project is environmentally spectacular, it is not harming the environmental issue. CSN has an important role in the sustainability and development
Regarding the demand for innovation in the exploitation of natural resources, as a way to minimize environmental degradation, such positioning was also codified during the analyses, and the following example can be highlighted:

It is not acceptable in this Chamber to talk that we have to license for economic reasons. We can't accept that, we are dealing here with environmental viability... Where is sustainable mining, where is mining coming together and proposing something different? ... So it's not like that, I don't agree with this premise that it's economic, it generates resources, jobs, income, and we have to automatically approve it (CEFET/MG Board Member. Minutes of the 45th Meeting. Date: 06/28/2019. Excerpt: 1002 to 1015).

It is interesting to note that the aforementioned speech addresses issues such as the real function of licensing, the use of pro-development arguments as sufficient justification to grant the required license, and the need to impose on the entrepreneur the duty to adopt production methods that are less degrading to the environment, in order to pressure him to seek innovation in the extractive sector.

It is also possible to identify how the notion of innovation applied to mining activity can be geared towards the maintenance and expansion of the economic production model based on the exploitation of natural resources:

Because we want to see in Minas Gerais is evolution, innovation, a mining that makes the state to be booming, that the state returns to its national and international image of minerals. We are now seeing in this pandemic that we are going through with the coronavirus that one of the points that will be most activated as an element of economic sustainability of a nation will be mining. It is mining that provides the basis for the production of chemical elements necessary for public health, it is mining that serves to ensure that we have better fertilizers for our agriculture, for our work and for our survival. (CREA Representative Councilor - Minutes of the 60th Meeting. Date: 05/29/2020. Excerpt: 197 to 218).

With this position, the CREA/MG representative explicitly reveals how innovation in the sector may be fundamentally focused on economic interests and not essentially on environmental preservation. It is not disregarded that the answer to such statement would eventually reside in the argument of inseparability between the two factors, however, the aforementioned logic seems to confirm that the preservation of the environment is focused on the continuity of its exploitation, given its non-renewable character, under the terms proposed in a capitalist production system, and not, essentially, in view of the recognition of the preserved environment as a fundamental collective value, representative of human dignity. It is noted, thus, that the attribute of innovation in the activity can be conceived as a value that is measured "by market mechanisms," according to Phillippi Jr and Pelicioni (2014).

Another important data code when formulating the category of analysis under consideration concerns the theme of integrated analysis of the enterprises, which involves the synergistic effects of the activity, as well as the practice of fragmentation of environmental licensing. The issue is of fundamental importance for the assessment of the environmental viability of the undertaking, a fact that obviously interferes in the formation of the counselors' judgment as to the possibility of granting the license, but, in addition, the issue has repercussions in the monitoring and inspection of the undertaking, and also in the social control.
to which it must be submitted. Below are selected manifestations to explain how the issue is conducted at CMI/COPAM.

We believe it is important to bring this up, because this Alegria Sul pit cannot be treated as a mere new licensing and that it has nothing to do with the greatest tragedy caused by mining. ... So, we are talking here, without a doubt, about a fragmentation. And one is trying, today, to decide the feasibility of installing a tailings dam whose mining complex is with all activities suspended, and has not yet finalized the analysis of the Corrective Operating License and its feasibility, in the face of complex and serious issues, in particular, related to safety, to ensure, definitely, that never again occurs what happened on November 5, 2015. (Councilor Representative of FONASC. Minutes of the 17th Meeting. Date: 11/12/1017. Excerpt: 295 to 374).

In response to the allegations of fragmentation, state representatives positioned themselves thus:

Regarding the fragmentation of the process, which was very much cited by the counselor, when DN 74 passed through COPAM, and later, when DN 217 passed through COPAM, an understanding that was very clear in the perception of the counselors is that the developments are not thought and installed and close, they are absolutely dynamic. To guarantee this dynamic of the enterprise, to guarantee the dynamic of the economy, to guarantee the dynamic of the legislative change itself, the DNs that establish licensing procedures brought the possibility of extensions. ... The state legislation conceptualized fragmentation. We only consider fragmentation of a process when this partitioning is done in a shady way, to benefit the entrepreneur (Suppri/SEMAD representative. Minutes of the 47th meeting. Date: 07/26/19. Excerpt: 859 to 880).

The aforementioned statement, which comes from a state agency, points out how the rules governing environmental licensing favor the use of procedures that, even under the cloak of legality, can compromise the control of the activity, especially with regard to the environmental feasibility of the enterprise. Such possible compromise results from the fact that it is not compulsory to submit the enterprise to an integrated analysis, in the face of requests for expansion of extraction activities. The justification of the dynamism inherent to mining once again privileges economic activity, to the detriment of environmental protection. Furthermore, the submission of the characterization of the practice of fragmentation to a subjective element - in this case the deliberate intention of the entrepreneur to circumvent the licensing process, with the aim of facilitating and speeding up the obtaining of the license - constitutes an additional obstacle to the exercise of social control, in view of the difficulty in producing evidence to this effect.

Moreover, the literature portrays the practice of fragmentation as a "trick" of the entrepreneur that ended up institutionalized in the licensing process, and it would become feasible in the face of the process of "flexibilization of environmental regulation", as well as the "reduction of rigor in the evaluation of large projects (Milanez and Santos, 2019).

Regarding environmental injustice, it was intended to extract manifestations that reported episodes or situations of environmental violence. Throughout the deliberation sessions analyzed, there is a high concentration of reports of this nature in deliberation sessions about enterprises linked in some way to the rupture of the Córrego do Feijão tailings dam in the municipality of Brumadinho, which occurred in 2019.

The concern with water shortage, expressed by a member of a community impacted by a project located in the municipality of Brumadinho, reveals the fear of deprivation of an essential right:
We wanted to believe, yes, that this enterprise will not bring impact, that the people from Vale speak the truth...Does anyone survive without water, do any of you drink iron ore? We are talking about survival, about life... And who is saying that there will be no shortage of water? The company responsible for Bento Rodrigues, the company responsible for Mariana, the company responsible for the Doce River. Have you forgotten this? Look who we are dealing with. If there is a shortage of water, remember today. (Minutes of the 37th Meeting. Date: 11/12/2018. Casa Branca community member. Excerpt: 1778 to 1825).

For a proper understanding of the fear expressed by the resident in the above account, it is necessary to consider the "different cultural representations" that traditional communities attribute to water, as explained by Zhouri, Oliveira, and Laschefski (2012):

"Such meanings constitute the foundation of particular forms of use and management of the resource in communities, where 'water-dom' or 'water-nature' is distinguished from the model of domesticated good present in corporate and governmental management practices.

Thus, especially in contexts like this one, in which the rural community establishes a differentiated relationship with water, the submission to the risk of deprivation of this good undoubtedly implies an injustice. Measures consisting in the supply of water via water trucks, for example, do not have the power, even minimally, to mitigate the effects resulting from the lack of water, after all, such a condition implies a change in the community's way of life, not only in terms of survival.

In fact, the disregard of this aspect, of a more subjective order, is highlighted in the following speech:

Initially, I would like to say that I haven't heard the technicians from any of the institutions talking about people. And what I saw here today was also a certain arrogance of certain people, who look at us, me representing my community, as if we were totally ignorant. This is not so. It's just that we don't live on studies, we can't perhaps make the necessary time available, that we would like, to study all this. But, ignorant, we are not. (Minutes of the 37th Meeting. Date: 11/12/2018. White House community member. Excerpt: 1826 to 1874).

In addition to the theme related to water resources, the above statement fits the practice of authoritarian governance, characterized by the "overvaluation of technical knowledge" (Laschefski, 2014), which ends up delegitimizing the actions of members of the community affected by the project, disfavoring and discouraging the participation of such social groups, which, in the end, further contributed to the process of invisibility to which they are subjected.

In another passage, we can see, from the report of an indigenous woman, how the licensing process, which is accompanied by the intensification of environmental conflicts, leads to violence and environmental injustice.

I am Angorró Pataxó Há-há-háe, Galdino's cousin, and I am also the president of the Federation of Indigenous Peoples of Brazil. I have come here to express my indignation, as an indigenous woman and representative of the indigenous people, for everything that has been happening to our Krenak people in Minas Gerais, who have been victims of Vale's biggest environmental crime? The mining companies are coming from outside, from another country, they don't ask us for permission to enter our land. ... We are people with different cultures, but before the god Tupá, we are all equal. (Minutes of the 37th Meeting. Date: 11/12/2018. Indigenous Federation of the Indigenous Peoples of Brazil. Excerpt: (1910 to 1945).
Once again violence is denounced through accounts of deprivation to ways of life in which the "territorial question" (Laschefski, 2019, p. 10) is indispensable for understanding and dimension of the effects imposed on people affected by mining. Thus, the so-called "strategic myopia of licensing" (Teixeira et al, 2021, p. 6) proves to be unacceptable, to the extent that it configures the state apparatus as a form of violence production, in total disagreement with the precepts that underpin the Socio-environmental State in force in Brazil.

6 CONCLUSION

From the analytical categories presented, it seems appropriate to conclude that the set of problems which beset the effectiveness of the environmental licensing process, especially in relation to enterprises in the iron mining sector, has negative repercussions on the rights of the entire community, as well as of individuals directly affected by the impacts resulting from the activity. The complexity of the environmental impacts generated by iron ore extraction activities in Minas Gerais is intense, and the institutional arrangement of the environmental agency responsible for licensing does not favor compliance with the precepts of the Socio-environmental State, nor the promotion of environmental justice, culminating in its ineffectiveness as an instrument of environmental policy intended for the regulation of economic mining activity.

The opposition of interests that mark the performance of economic and social agents, as well as the tendency of the State to align with the former, reveal the need to improve the regulatory rules for mining activities, notwithstanding the claims for debureaucratization of the licensing system, with a view to favoring economic policies of a developmental conception that neglects or even ignores the warnings of scarcity of resources and the compromising of environmental well-being. The relaxation of environmental licensing - the main regulatory instrument in the search for control over activities that typify market dynamics - is incoherent, since the legal good of the environment needs special protection against predatory desires to exploit scarce and non-renewable natural resources. If the state intervention does not have the real purpose of imposing balance in the exploitation of environmental resources, there is a serious compromise of the Socio-environmental State's foundations, since it not only fails to protect and guarantee a healthy environment, but mainly allies itself with the economic sector, using licensing as a mere strategy to legitimize its activities.

In this context of violation of the Socio-environmental State, environmental justice is compromised as a gap to be overcome in the environmental licensing process, in which the holders of great economic and political power succeed in disproportionately imposing the negative impacts of mining activities on the members of the communities that host the enterprises, besides ensuring the development of activities that receive the status of indispensable for economic and social development, legitimizing themselves as such.

The present research has limitations inherent to the qualitative analysis method, given that the particularity of the researchers' view of the statements made by CMI/Copam councilors ends up restricting possible generalizations about some points. The research proposed to analyze the set of deliberation minutes from different environmental licensing processes, linked to several enterprises, which made it impossible to survey each one individually. In future studies, it is possible to select a reduced number of processes, in order to favor a more in-depth analysis of the enterprises involved, highlighting the relationships established between mining companies, the State, and civil society directly affected by mining operations, expanding the set of data collected, including beyond the institutionalized decision-making spaces.
REFERENCES


FONTOURA, Yuna; NAVES, Flávia; TEOSÓDIO, Armando S. S.; GOMES, Marcus V. P. “da lama ao caos”: reflexões sobre a crise ambiental e as relações Estado-empresa-sociedade. Farol – Revista de Estudos Organizacionais e Sociedade. (2019).


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