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Municipal environmental councils and the environmental assessment index in medium-sized cities in the state of São Paulo / Brazil

Conselhos municipais de meio ambiente e o índice de avaliação ambiental em cidades médias do estado de São Paulo / Brasil

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ABSTRACT: The escalation of environmental problems on the planet has greatly impacted the quality of human life, imposing, in addition to technical challenges, complex political, economic and social challenges that, in the end, indicate a new way of existing and being in the world. In democratic countries, the ideal is that the process of producing public policies, from formulation to evaluation, should include the participation of society, not only to defend its interests, but also to control state actions. Since the Constitutional Charter of 1988, Brazil has stood out for expanding the participatory arenas in the process of production and control of public policies. The policy management councils are examples of these democratic decision-making arenas. Accordingly, the aim of this work was to highlight a possible relationship between the existence of municipal environmental councils and the results of the Environmental Assessment Index (IAA), developed by the Department of Environment of the state of São Paulo/Brazil. Ten medium-sized cities in São Paulo state were selected as the sample universe, analyzing the IAA from 2019 and 2020 and relating the dimensions of the index with the existence or not of municipal environmental councils. The study did not intend to establish a direct causal relationship, however, the existence of councils presented a strong positive influence with high IAA scores and improvements in the other dimensions considered by the index.

Keywords: municipal environmental councils; democracy; medium cities; environment; environmental assessment index.

RESUMO: A escalada dos problemas ambientais no planeta tem impactado sobremaneira a qualidade de vida humana, impondo, além dos desafios técnicos, desafios políticos, econômicos e sociais complexos que, no limite,

apontam para uma nova forma de ser e estar no mundo. Em países democráticos, tem-se como ideal que o processo de produção de políticas públicas, da formulação à avaliação, conte com a participação da sociedade, não só para defender seus interesses, mas para controlar as ações estatais. Desde a Carta Constitucional de 1988, o Brasil tem se destacado por ampliar as arenas participativas no processo de produção e controle de políticas públicas. Os conselhos gestores de políticas são exemplos dessas arenas democráticas de decisão. Assim, o objetivo deste artigo é apontar uma possível relação entre a existência de conselhos municipais de meio ambiente e o resultado do Índice de Avaliação Ambiental (IAA), desenvolvido pela Secretaria de Meio Ambiente do Estado de São Paulo/Brasil. Selecionou-se, como universo amostral, dez cidades médias do Estado de São Paulo, analisando o IAA de 2019 e 2020 e relacionando as dimensões do índice com a existência ou não de conselhos municipais de meio ambiente. A pesquisa não pretendeu estabelecer uma relação causal direta, mas constatou-se forte influência positiva entre a existência de conselhos com escores elevados no IAA e a melhoria nas demais dimensões consideradas pelo índice.

Palavras-chaves: conselhos municipais de meio ambiente; democracia; cidades médias; meio ambiente; índice de avaliação ambiental.

1. Introduction

The beginning of the 21st century indelibly marks the city as the center of many debates on sensitive and urgent issues around environmental problems, democracy, quality of life and social justice. If, on the one hand, cities represent the origin and/or potentialization of such problems, on the other hand, it is through them that structuring actions of change are projected that indicate substantial improvements in the quality of life, not just circumscribed in the city itself. That is, cities are strategic for the general improvement of the quality of life on the planet, as highlighted by the New Urban Agenda of the United Nations (ONU, 2017).

For Acselrad (2009), in the context of increasing environmental concerns, there is a movement in two directions: at the same time that the environmental issue is included in urban guidelines, urban issues are now included in environmental concerns. These movements take place in different discursive matrices and, obviously, the plot and complexity tend to increase with the multiplicity of positions, interests, agents and articulations. It is important to emphasize that the centrality given to cities goes beyond their characteristics of concentration and agglomeration of people and services, as they are centers of command and reference, especially when located in intermediate or higher positions in the urban hierarchy.

In the set of cities, we highlight the medium-sized one, the empirical basis of this article. According to the Brazilian Institute of Geography and Statistics (IBGE), medium-sized cities are those with between 100 and 500 thousand inhabitants, with those below 100 thousand considered small and those above 500 thousand large. Despite the operational facilities in using this focus, when we consider only the quantitative dimension of the demographic basis for this classification, we are faced with reductionisms and simplifications that limit the comprehension of the role and importance of cities within their regional structure and urban hierarchy. Therefore, the concept of the medium-sized city that we consider in the article is in line with that of Sanfeliu & Torné (2004), Branco (2006) and Sposito (2010). According to these authors medium-sized cities play an important intermediation role in the

urban network, establishing regional, national and international relations, these being keys to the urban system. For Sanfeliu & Torné (2004), the definition of medium-sized cities includes characteristics such as their ability to articulate and create networks, the creation of dynamics and strategies that strengthen their regional role and their expansion to other levels (national and international), and the overcoming of their static and hierarchical character (classical concept) to an open, dynamic and interactive urban system. Catelan (2013), discussing broader urban networks at multiple scales, worked with the concept of urban heterarchy that is defined from interscale spatial interactions, positioning medium-sized cities in complex movement within networks that extrapolate relations of urban hierarchy.

In Brazil, cities gained greater prominence with the 1988 Constitution, with emphasis on articles 182 and 183 (Brasil, 1988), which aimed for greater democratization of public policy processes, decentralization of power and a commitment to greater autonomy and accountability of federal entities, especially at the municipal level. Therefore, by establishing the formal transition to democracy, the Constitutional Charter sanctioned the decentralization of decision-making and established mechanisms for the participation of the citizen in the formulation, administration and monitoring of social policies, such as, for example, the management councils. A few figures are enough to outline the importance that the councils have assumed in the country: there are approximately 30,000 public policy management councils in the 5,570 municipalities of Brazil, and, consequently, several tens of thousands of civil society councilors participating in the definition and supervision of public policies (Gurza Lavalle *et al*., 2016). They are organized at all levels of government, from local to federal, and aim to be a space where citizens, service providers and government come together to define public policies and oversee their implementation. With the increased protagonism of the municipalities, the municipal councils have gained visibility, with them having greater or lesser importance and activity depending on many variables, for example, the political sector (Gurza Lavalle & Barone, 2015; Luchmann *et al*., 2018; Almeida et al., 2021).

This article highlights the possible relationship between the municipal environmental councils and the improvement of the Environmental Assessment Index (*Índice de Avaliação Ambiental* - IAA) developed in the state of São Paulo, which is an indicator that comparatively evaluates the environmental performance of the municipalities of São Paulo state that adhere to the VerdeAzul Municipality Program. This program, as will be discussed later, classifies municipalities based on ten environmental directives, assigning the VerdeAzul Municipality seal to those that obtain scores greater than 80 points.

This was an exploratory study, aiming to verify the fluctuation of the variables analyzed, highlighting their correlations, with a set of medium-sized cities in the state of São Paulo composing the sample. The preliminary hypothesis of the work was that the existence of active municipal environmental councils in medium-sized cities could influence the other variables considered in the IAA. To demonstrate this result, the article was structured in three parts. The first presents some of the theoretical references with which we dialogue to discuss the environmental problem in cities and municipal environmental councils, emphasizing the importance of the participatory institutions in the management of the environment. The second part

presents the methodological structure followed to achieve the results and its treatment. In the third part, the organized and systematized data and the elaboration of their analyses are presented.

2. Theoretical foundation

2.1. Urban environmental problems

The 19th, 20th and 21st centuries saw diverse transformations and ruptures in the history of humanity, with scientism, the technique and the way in which these were used, through the economic model of industrial capitalism that emphasizes large-scale productivity and the maximization of profit, to the detriment of the environmental crisis it causes (Giddens, 1991). Accordingly, it was increasingly common for the environment to present itself as a scenario in decline, with the increase in air, water and land pollution, due to the accumulation and incorrect disposal of waste produced and consumed, among other reasons.

Based on his work "*Capitalismo e Colapso Ambiental*", Marques (2015) inferred that the logic of increasing productive capacity driven by the expansion of the global economy provides greater insecurity throughout the global socioeconomic and socioenvironmental system, due to causing numerous environmental impacts. The environmental disturbances were not perceptible by the majority of the population, in particular, due to the euphoria provoked by the idea of economic prosperity, which would have made it difficult to become aware of the damage to the environment. This difficulty is explained by the theory of the Three Concentric Illusions decomposed by the illusion of contemporary political, social and economic thought projected under the hope of making capitalism sustainable; the illusion that more surplus = more security; and the anthropocentric illusion (Marques, 2015). Regarding these illusions, the author emphasized that:

> Capitalism could perhaps come closer to sustainability if its regulation were conducted by a mixed mechanism, in which the State and civil society had sufficient weight to counterbalance the blind forces of the market. This is no longer the case, because in an emergency phase the State-Corporations have no interest in confronting corporations and, if they did, they would no longer have the strength to do so. Therefore, the immense task of confronting them falls on the shoulders of civil society. It is still unknown whether it will be able to take on this task, which presupposes, first of all, giving up the fascination for consumerism and the age-old psychological constant: more surplus = more security (Marques, 2015, p. 506).

According to the author's position, there is no way for capitalism to become sustainable, because the logic of accumulation does not allow for regulatory traits that slow it down, as this would mean its collapse. Under capitalism, the physical environment itself is raw material for the economic system and its maintenance, which could be questioned by the State and/or civil society. However, it is known that the culture of consumerism and the prevalence of dominant class interests value the illusion that more surplus = more security, making it difficult to adopt a more regulatory stance on behalf of state and a more questioning stance on behalf of society.

For Marques (2015), the technological and scientific advances of the 17th and 18th centuries made it possible to indefinitely expand the power to operate nature insofar as it increased the reproduction of capital based on knowledge and information.

From the perspective of Romeiro (2019), this expansion reiterated an idolatry of technology (technolatry) as an unlimited instrument for producing surplus from the endless transformation of nature.

Regarding the anthropocentric illusion, Marques (2015, p. 551) considers three dimensions of this illusion: "the cosmetological and teleological presumption, the biological presumption, the ecological presumption". All of them place man at the apex of the chain of life, as an entity superior to nature, as he possesses skills that make it meet his needs and adapt to him. All these inferred illusions project a certain invisibility to environmental impacts and, consequently, inaugurate optimism in the perspective of solutions based on sustainability or technology, making the environment increasingly scarce and degraded.

Among all the structural transformations that modify the dynamics of terrestrial systems, with humans being the protagonists, cities reflect both human actions in the field of nature and the impacts caused by them. The environmental crisis represents a global, multifaceted and multidimensional problem that transcends the local territorialities of a civilizational crisis. As a whole, the political nature of the environmental problems and the need to structure actions on multiple scales stand out (Orsi, 2016).

Cities express a paradox of our time: they present unsustainable structures at the same time that they symbolize a possible tool to minimize the current environmental crisis that humanity is going through. Unsustainability is not a feature of the city itself, but of urban society, as defended by Ribeiro (2005). Urbanization can be comprehended as a historical process, which cannot be reduced only to a physical/concrete dimension, according to Brenner & Schmid (2016). Furthermore, according to the United Nations (2015) it is estimated that in 2050 about 66% of the world's population will live in urban areas. Therefore, it is necessary to highlight the political and social issues, with different spatial and temporal scales, around the environmental problem.

The urban agglomeration itself has the potential for rationalizing actions that can lead to greater sustainability, whether through reducing the use of materials and energy for production and consumption, or through other forms of interactions and social dynamics, even seeking new ways to inhabit cities. The aforementioned authors also highlight the multiplier effect of urban sustainability, given that the multiple relations and articulations within the city allow sectoral changes to have broad impacts on the city, reflecting positively on various sectors. The emphasis given to cities, obviously fundamental, does not mean a simplification to localism. According to Sathler (2014), immediate environmental public policies are directly related to the competence of the local governments that represent the level of governance closest to the citizens. Bulkeley & Betsill (2010) added that it is necessary to go beyond the locale, analyzing several scales of governance to understand the paths to urban sustainability, because the locale may often seem invisible for the other spheres of government.

From this perspective of governance scale, Sathler (2014) also highlighted that to adjust "community interests" from integrated actions of local management, the joint participation of higher levels of government, such as states and the union, is necessary. This highlights, however, the local sphere as having more agile decisions in relation to the other spheres (Kates & Wilbanks, 2003). It also emphasizes that the involvement of communities

benefits the development of urban policies, as the local level allows the participation of populations affected and/or interested in a given public policy.

From the point of view of communities, we emphasize the current of the new Latin American constitutionalism which, according to Wolkmer & Fagundes,

> (...) translates into giving life to the words enshrined in formal texts, which are confirmed in practical actions, leading populations in the regime of political and social marginalization to better living conditions; this is the transforming requirement. As long as they also constitute processes that bring together forces from the historical cosmovision of the Amerindian or peasant, in the new constitutional order (Wolkmer & Fagundes, 2011, p. 379).

For the authors, the new constitutionalism appears as a way to overcome the discontent of the citizen who was on the margins of the interests of the dominant classes. In this context, Gheller (2015, p. 71) emphasized that "currently, discussions and claims, in the most diverse national and international public spaces, focus on human relationships governed by values that promote social, political and economic inclusion".

Also, according to the author, some South American countries such as Brazil with CF/1988, Colombia in 1991, Venezuela in 1999, Ecuador in 2008 and Bolivia more recently in 2009, presented a new constitutionalism guided by postures focused on social, environmental and democratic aspects (Gheller, 2015). Wolkmer (2013) clarified that the avant-garde of Andean constitutionalism, especially the example of the Constitution of Ecuador and Bolivia, focuses on the materialization of new social subjects and biocentric practices. The Constitution of Ecuador is the great representative of the positivization of the ecocentric vision, attributing rights to nature, prioritizing the preservation and restoration of damage.

Wolkmer & Melo (2013) emphasized the innovative political and legal scenario that has been constructed over the last few years in Latin America. Certainly, the creative proposals, with its focus based on social rights capable of bringing new horizons to the relationship between the State, society and nature, were symbolized in the conception of "*Nuestra América*": the construction of a more democratic strand, more decolonized and concerned with maintaining geopolitical origins.

This same concern appears in Brazilian Environmental Law, which dialogues with some philosophical currents that question the recipient of the right, that is, who the Environmental Law aims to defend and protect. These currents propose a biocentric vision that breaks with classic anthropocentrism – which placed human beings at the center of all terrestrial life –, projecting itself from the possibility of dominating nature through instrumental reason, with countless consequences for the biotic and abiotic environment. For the biocentric view, all forms of life have the same importance, with no hierarchical distinction between humanity and the other components of the biosphere, with these passing from objects to subjects of law. Biocentrism is related by some authors (Leite, 2000; Bello Filho, 2004) to deep ecology, in which there is no human superiority over nature. It is important to highlight that, at different times, the radicalism of the most extreme strands of deep ecology represents a barrier to dialogue with conservative sectors of the economy, politics and civil society itself.

Authors such as Canotilho & Leite (2007) defend the idea that the 1988 Constitution prioritizes so-called broad anthropocentrism, with man as a subject of law, but infers ecocentric or biocentric responsibility. The Constitutional Charter, according to these authors, values the realization of human dignity, which implies the need to also protect certain values and interests related to the environment. Therefore, as established in art. 225 of CF/88 (Brasil, 1988), the main attribution of the Environmental Rule of Law is to protect and defend an ecologically balanced environment for current and future generations.

The broad anthropocentric view means that the Law protects legal interests that are distinct from the human, however, it should not be inferred that it has become biocentric or ecocentric. This model of anthropocentrism "centers environmental preservation on guaranteeing the dignity of the human being", considering environmental protection precisely for "the survival of the human species itself" (Leite, 2007, p. 137). From the view of a new perspective between man and nature without extremism, Leite (2003, p. 76) suggests that broad anthropocentrism allows the disruption of hierarchies and superiorities, enabling "an interaction between different universes and the human action".

In this direction, Law No. 6.938/81 (Brasil, 1988), which establishes the National Environmental Policy (*Política Nacional de Meio Ambiente* - PNMA), symbolized the first major normative framework for environmental protection, in response to international discussions and pressures and from different social sectors within the country, which occurred mainly in the second half of the 20th century. These pressures materialized in the Federal Constitution of 1988, with Article 225. For the first time in Brazilian history, a Magna Carta dealt specifically with the theme of the environment. The municipal organic laws express the relevance given to the theme, as they advanced environmental regulations, as shown by Ferreira (2004). This evidences the emergence of the problem and its inclusion in the programs of governments that began to observe the need for this approach. For Machado (2012), the environmental issue, in its entirety, is a mandatory topic for governments and society, as it compromises current and future generations, as well as the quality of life of all living beings on the planet, that is, it is a question that contemplates the individual, social and intergenerational triple.

The PNMA brought with it the creation of the National Environmental Council (*Conselho Nacional de Meio Ambiente* - CONAMA) and, later, the creation of the National Environmental System (*Sistema Nacional de Meio Ambiente* - SISNAMA), regulated in 1990, already under the framework of CF/88, which established roles for environmental agencies of other federal, state, Federal District and municipal entities. Accordingly, it can be said that in the last 40 years, Brazil has witnessed great progress in the legal framework of the environment sector, constituting a National Policy and System, Councils that spread throughout the territory, the National Policy on Climate Change, the National Policy on Environmental Education, the National Policy on Solid Waste, and the National Policy on Urban Mobility, among other sectoral or tangential legal devices for the environment.

It can be seen that the environmental issue has developed with advances and setbacks, in relation to the consolidation of agendas and its legitimacy in society. The strong ultra-conservative wave of the extreme right, which took over several governments

around the world at the beginning of this second decade of the 21st century, part of it in a movement that denied scientific evidence, represents a strong moment of regression. However, there are consolidated environmental agendas and critical movements, coming mainly from organized civil society and supranational bodies, contrary to anachronistic government postures. It is still important to highlight that in this movement of advances and setbacks, the role of the technological development itself as an alternative to environmental problems is not negligible. That is, an existing problem, but one that was submerged, comes to the surface as a problem and enters the agenda of discussions and referrals as future alternatives, viable from a technological and economic point of view, are already projected. In any case, whether from a pro or skeptical perspective in relation to technological advances, the role of the State is fundamental. Chomsky & Pollin (2020), dealing with the climate environmental crisis, defend the role of the State, using different regulatory and inducing mechanisms to combat the impacts and the origin of the problems. This is not an exclusive state action, but it is key together with the action of the market and civil society. Accordingly, the State should not omit itself from the issue in any of its instances.

Looking at the State's performance, we can say that the environmental sector experienced a setback during the government of Jair Bolsonaro, which led to the deregulation of the sector, the dismantling of agencies, arbitrary dismissals, public attacks by government members and supporters on NGOs and environmental agencies, and financial strangulation, etc. The attack on the environment sector was accompanied by attacks against civil society participation in forums for debate and deliberation on its guidelines. This was seen with Decree No. 9.806, of May 28, 2019, which sought to reduce the number of CONAMA advisors from 96 to just 23 members and the seats of civil society representatives from 11 to 4. The decree replaced the method of choosing entities, previously selected by election, for a draw; restricted access to seats to so-called national entities; removed the seats of the Chico Mendes Institute for Biodiversity Conservation (ICMBio), the National Water Agency (ANA), the Ministry of Health and entities linked to indigenous issue; reduced the seats for the states, which were previously entitled to their own representative, to one seat per geographic region (being five in total); and reduced the spaces per municipality from 8 to 2, restricted to the capitals. Finally, it extinguish the positions of councilors without the right to vote, which were held by representatives of the Federal and State Public Attorney's Office, and the Commission for the Environment and Sustainable Development of the Chamber of Deputies (ANPR, 2021).

The emptying of CONAMA's representation of actors and societies involved with the environmental issue set back important achievements that sought, through the participation and joint action of socio-state actors, the solution to socio-environmental problems, which only got worse with the disastrous management by the president of the republic. Therefore, despite the important advances achieved in previous years in terms of legislation, the socio-environmental situation in Brazil is dramatic in different senses, which are experienced daily in Brazilian cities, greatly impacting the quality of life in cities, especially for the poorest people. Acselrad (2009), when dealing with the discursive matrices present in the debate around sustainability, emphasized equity as one of these matrices, which

follows principles of justice articulated with ecology. This field would be present in the representation of cities as a space for legitimizing urban public policies. It follows from this that unsustainability would be in the mismatch between the capacity of public policies to democratize access to urban public services, as well as expanding infrastructure capable of improving the quality of urban life for all citizens.

The picture of environmental injustices, with a strong character of environmental racism (Paixão, 2004), is structural in Brazil. This is a perverse picture that, while relegating a large burden of environmental problems to the most vulnerable, feeds back their condition of vulnerability. It is outside the scope of the article, however, it is worth noting, according to Beck (2010), that the distributive conflicts of the scarcity society overlap with conflicts arising from the distribution of the undesirable in the urban-industrial society. On this basis, the institutions of modernity have systematically failed to control environmental problems and create conditions for improving the quality of life for the most vulnerable population.

Diamond (2005) observed that disastrous decisions regarding the environment can be taken for a number of reasons: "inability to foresee a problem, inability to perceive it as soon as the problem manifests itself, inability to try to solve it after it has been identified and inability to be successful in the attempts to resolve it" (Diamond, 2005, p. 523). It seems that the last inability presented by the author is the most relevant in our society, particularly with regard to urban environmental policies in Brazil. In this turmoil, it is urgent to expand debate arenas – and not empty them – on the environmental agenda, with a view to designing creative and innovative solutions to its issues. Our premise is that the more democratic the debate on public policies is, enabling dialogue and sharing of experiences between social and state actors involved in a given sector, the greater the chances of success of the public policy. Management councils are democratic innovations that open space for dialogue between state and social actors, expanding the alternatives for success in the entire cycle of public policy, including the control and evaluation of results. This is covered in the subsequent item.

2.2. The municipal environmental councils

Since the Constitutional Charter of 1988, the Brazilian State, in some periods more than in others, has been constructing institutionalized channels for society's participation in decision-making processes and promoting articulation with internal and external control agencies. The legal foundation promoted the development of a comprehensive institutional framework for citizen participation, which included management councils, public ombudsman offices, public policy conferences and participatory budgets. This myriad of participatory experiences was accompanied by a significant advance in research in the field (Tatagiba, 2002; Pires, 2011; Almeida & Tatagiba, 2012; Teixeira *et al*., 2012; Avritzer & Souza, 2013; Almeida *et al*., 2015; Martelli *et al*., 2018; Luchmann *et al*., 2021).

Some agendas have turned to studies on the effects or results of participatory experiences in the functioning of Brazilian democracy. It is not by chance that there has been talk of the problem of effectiveness (Avritzer, 2011) or an agenda of effectiveness (Gurza Lavalle *et al*., 2016), with a

considerable production of research that has addressed evaluation strategies in different ways and from different angles (Pires, 2011). Researchers have also advanced in understanding that there are multiple meanings for the term effectiveness, and that broadening the range of meanings implies broadening the analytical lens for assessing the effectiveness of participatory experiences for the quality and/or deepening of Brazilian democracy (Romão & Martelli, 2013; Almeida, 2017; Zorzal & Carlos, 2017; Martelli *et al*., 2019; Martelli & Coelho, 2021).

Of the various participatory mechanisms in Brazil, Management Councils, as well as Participatory Budgets, had great prominence in the 1990s, with health councils being the paradigm that inspired the constitution of councils in other areas such as the environment, employment and income, social welfare, rural development, education, urban planning, public security, and the fight against drugs, among others. There are councils that deal with guaranteeing the rights of children and adolescents, black people, indigenous peoples, women, people with disabilities, and older adults, among others, which are well summarized in a dossier on the subject (Cortes & Gugliano, 2010). The councils are part of the administrative structure of the public policy areas to which they are linked. The councils' agendas, the issues over which they have power to decide, and their institutional role are shaped by pre-established rules and by the needs created by the institutional characteristics of each area. The general lines of the work dynamics of the councils are also determined by legal and administrative rules (Cortes, 2005; Cortes & Gugliano, 2010; Almeida & Tatagiba, 2012).

Considering the area of interest in this work, we highlight that the peak of the wave of creation of municipal environmental councils only occurred in the second half of the 2000s, although CONAMA was created in the 1980s (Coelho *et al*., 2019). During the administration of Minister Marina Silva (2003-2008), CONAMA's operation was intense and constant, integrating different sectors to work on the different interests involved in environmental issues. The objective was to promote greater involvement of different ministries, state and municipal governments, civil society, including the private sector, NGOs, indigenous peoples, quilombolas and traditional communities, with an emphasis on a shared and participatory perspective. National, state and municipal Conferences and Councils played a relevant role in the period, expanding throughout the national territory (Abers & Oliveira, 2015; Almeida *et al*., 2021).

Nunes et al. (2012) provided data from a study with the Municipal Council for Environmental Management and Sanitation of Santo André, State of São Paulo, drawing attention to the fact that the democratization and municipalization of environmental management, advocated by national legislation, offers an opportunity for local interests, with the ecological, economic and social particularities of each region taken into account in the management process, directed towards the promotion of public and environmental health.

Novicki & Souza (2010) also highlighted the importance of the Environmental Councils, especially at the Municipal level, as institutional spaces where plural interests around the environmental issue can be captured and can contribute to the management of local socio-environmental problems. These spaces would have the potential to strengthen

civil society and the public interest within the State apparatus, in order to place social and environmental issues on the agenda of its discussions under the logic of democratic sustainability, via articulation of technical and social solutions. This movement differs from the logic of the market, which favors, above all, the adoption of procedures that dissociate environmental issues from social problems, especially in terms of not problematizing current production and consumption patterns. However, attention is drawn to the fact that the ability of the CMMA to influence the formulation, implementation and evaluation of government policies collides with, among other aspects, various disputes that mark the Brazilian State, materializing, therefore, in the very structure and functioning of the agencies responsible for the different policies linked to the environmental issue, in the three federal spheres.

Disputes aside, the councils have assumed such a relevant role in Brazilian municipalities that the Environmental Assessment Index (*Índice de Avaliação Ambiental* - IAA), created by the state of São Paulo Department of Environment in 2007, to assess municipal environmental management, has as a compulsory item to establish deliberative municipal councils, with equal representation, and with regular activities. Without the councils, there is no "VerdeAzul Municipality" seal, as will be demonstrated in the next section.

3. Methodological procedures

The study had an exploratory and analytical character, having as a reference source data that made up the Environmental Assessment Index (SMA, 2018) in the state of São Paulo/Brazil for the years 2019 and 2020. This indicator is a methodological resource to evaluate, quantify and numerically classify the performance of environmental public policies in the 645 municipalities of São Paulo. Created in 2007 by Resolution No. 21 of the Department of Environment of the state of São Paulo (*Secretaria do Meio Ambiente do estado de São Paulo* - SMA), the Verde Municipality Program, later renamed the VerdeAzul Municipality Program (*Programa Município VerdeAzul* - PMVA), aims to evaluate municipal environmental management in each of the municipalities of the state of São Paulo. Its results are expressed by the IAA and published as an environmental ranking in São Paulo. The VerdeAzul Municipality Certificate is granted to Municipalities that achieve a score of 80 (eighty) or more in the Environmental Assessment Index - IAA. To be certified, the Municipality must:

I - Establish, by law, the Municipal Environmental Council, with a consultative, egalitarian, deliberative and normative character. The Council should also hold monthly meetings;

II - Institute the Environmental Executive Structure by law and implement it;

III - Not obtain a final score of 0 (zero) in any of the Environmental Directives in the Certification Qualification;

IV - Not obtain a final score of 0 (zero) in any of the Environmental Directives in the Certification;

The calculation to obtain the index, represented by table 01, according to Resolution No. 33 of the 2018 SMA, is composed of the following formula: IAA = ΣIDDc + ΣPROc – PA. Where: ΣIDDc is the sum of the Performance Indicators of the Certification Directives, the maximum value

of which can reach 90 (ninety) points; ΣPROC is the sum of the marks obtained in the Proactivity of the Certification Directives, the maximum value of which can reach 09 (nine) points; and the PA are liabilities, that is, pending environmental issues that are the responsibility of the municipality. This value varies from 0 (zero) to 20 (twenty), according to the liabilities calculated by the São Paulo Environmental System, based on the following items:

a) existence of contaminated areas and penalties applied by the Environmental Company of the state of São Paulo (CETESB);

b) issues pending in relation to the environmental licensing;

c) non-compliance with the Environmental Recovery Commitment Term (*Termo de Compromisso de Recuperação Ambiental* - TCRA) - Licensing or Assessment;

d) Sewage Collection and Treatability Index for the Municipality's Urban Population (*Índice de Coleta e Tratabilidade de Esgoto da População Urbana do Município* - ICTEM);

e) Waste Landfill Quality Index (*Índice da Qualidade de Aterro de Resíduos* - IQR); and

f) Minimum Legal Framework indicated by the VerdeAzul Municipality Program (*Programa Município VerdeAzul* – PMVA).

Also, for the calculation of the Certification, there is a previous calculation for the Qualification of the Certification, in which a prior analysis is made of the data coming from the state of São Paulo Environmental System and supporting documents presented by the municipalities, with a minimum of 40 (forty) points to qualify.

Considering a set of variables common to the 645 Municipalities of São Paulo, ten PMVA directives were defined - table 02 -, as well as the parameters of each one of the directives. The ten current directives, established by Resolution No. 33 of the 2018 SMA, are:

Over the eleven years of the program, the directive of the Municipal Council has been gaining representation in the IAA and, in the most current resolution, it is a mandatory requirement to obtain certification. After the calculation and weighting of the directives, the VerdeAzul Municipality Certificate is granted to those who achieve a score of 80

TABLE 1 – Formula for calculating the Environmental Assessment Index.

	Cálculo
IAAc = ΣIDDc + ΣPROc – PA	**ΣIDDc -** is the sum of the Performance Indicators of the Directives - IDDC, for the Certification, with a maximum value of 90 (ninety) points. **ΣPROc** - is the sum of the scores obtained in the Proactivity of the Directives - PROC for the Certification, with a maximum value of 09 (nine) points. **PA -** are environmental liabilities and/or pending issues that are the responsibility of the Municipality. This value varies from 0 (zero) to 20 (twenty), according to the liabilities determined by the São Paulo Environmental System.

SOURCE: São Paulo (2018). Prepared by the authors.

(eighty) or more points in the IAA, from the 100 possible, as previously mentioned.

TABLE 2– The ten directives that make up the IAA calculation.

Directives	Sustainable Municipality
	Environmental Structure and Education
	Biodiversity
	Environmental Council
	Water management
	Air quality
	Soil Use
	Urban Afforestation
	Treated sewage
	Solid Waste

SOURCE: São Paulo (2018). Prepared by the authors

The present study, considering the values of each of the directives individually, analyzed the behavior of the variables having the "Environmental Council" directive as a reference for the analysis. Using Pearson's correlation coefficient, correlating the environmental council directive to the other directives and organizing the data in scatter plots and line graphs, the quantitative data was analyzed, focusing on the councils, without intending to establish a direct causal relationship.

The universe of analysis was a set of medium-sized cities, headquarters of the administrative regions of the state of São Paulo - except for metropolitan regions - which totaled ten municipalities - Araçatuba, Araraquara, Barretos, Bauru, Franca, Itapeva, Marília, Presidente Prudente, Registro, and São José do Rio Preto: as presented in table 03 below:

The study also had a documentary dimension, analyzing resolutions and decrees linked to the PMVA, extracting from them information about the environmental councils, since they make up the main directive of this work. These procedures provided a panorama that can be analyzed, allowing inferences about the environmental councils in the set of directives that make up the IAA and, in an expanded form, about the environmental quality of the municipalities.

TABLE 3 – Estimated number of inhabitants per municipality of the sample.

City	Inhabitants (2020 estimate)
Araçatuba	193,129
Araraquara	238,339
Barretos	123,546
Bauru	379,297
Franca	358,539
Itapeva	94,354
Marília	242,249
Presidente Prudente	230,371
Registro	56,393
São José do Rio Preto	464,983

SOURCE: IBGE, 2020. Prepared by the authors.

4. Results and discussions

The data analysis showed the strong involvement among the variables considered. Observing the dataset of the two years (2019 and 2020) it can be seen that the directives of most of the municipalities oscillated in a standardized way, that is, without many disparities between them in each of the municipalities. The municipality of Marília and Presidente Prudente, in 2019, were very enlightening: in the first case, all variables had very low scores, and in the second, the scores were high. Important exceptions are Araraquara, Bauru and Franca, where one set of variables had high scores, however, some

variables had low scores, as can be seen in Figures 01 and 02, below.

The behavior of the data, verified in figures 01 and 02, shows that the curves of each of the directives oscillate as if they were in blocks, showing cohesion between the directives in each of the municipalities considered. This fact is quite evident in 2019, when one observes the set of Barretos, Marília and Registro municipalities, presenting data with low values, that is, with a negative assessment in environmental terms, according to the PMVA assessment for these directives. On the other hand, Bauru, Presidente Prudente and São José Do Rio Preto presented data sets with high values. This behavior was repeated in 2020, with the exception of Marília, where there was a great variation between the "Sustainable Municipality" directive, with a high score (10.0) and "Water Management", with a low score (2.04), and Registro where the "Solid Waste" directive differed from the other directives. In the 2019 data, Araçatuba and Araraquara also presented divergent behavior in relation to the set of cities evaluated. In the case of Araçatuba, there was a higher score in the "Municipal Council" directive, however, the other directives presented very low values, except for "Solid Waste". It is important to emphasize that in the case of Araçatuba, although the score achieved by the council variable was the highest in the city as a whole, the value itself was low when compared to the cities with the best performance. For Araraquara, the opposite occurred. The council variable was the lowest of the entire set of municipal directives, followed by urban afforestation and land use, which did not prevent the municipality from achieving relatively good values in other directives and a high final IAA score above

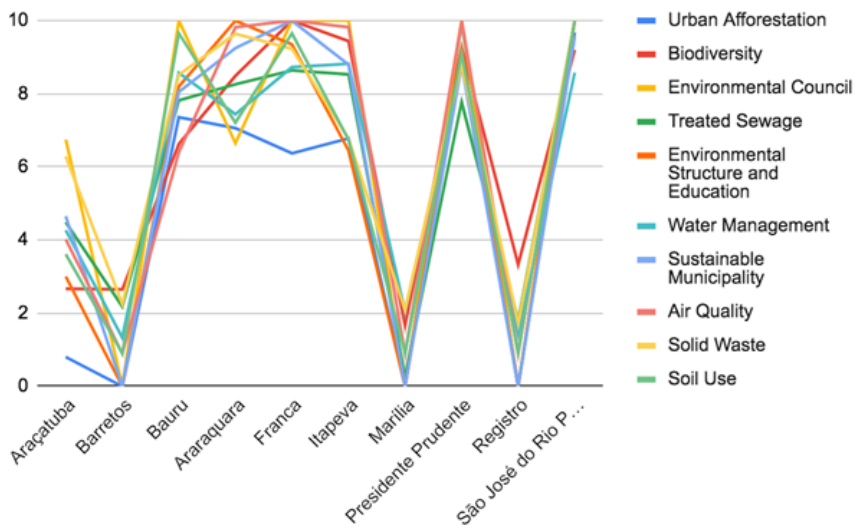

FIGURE 1 – Scoring of the Environmental Assessment Index Directives in 2019 in the selected Municipalities.
SOURCE: Department of Infrastructure and Environment (SP), 2020. Prepared by the authors.

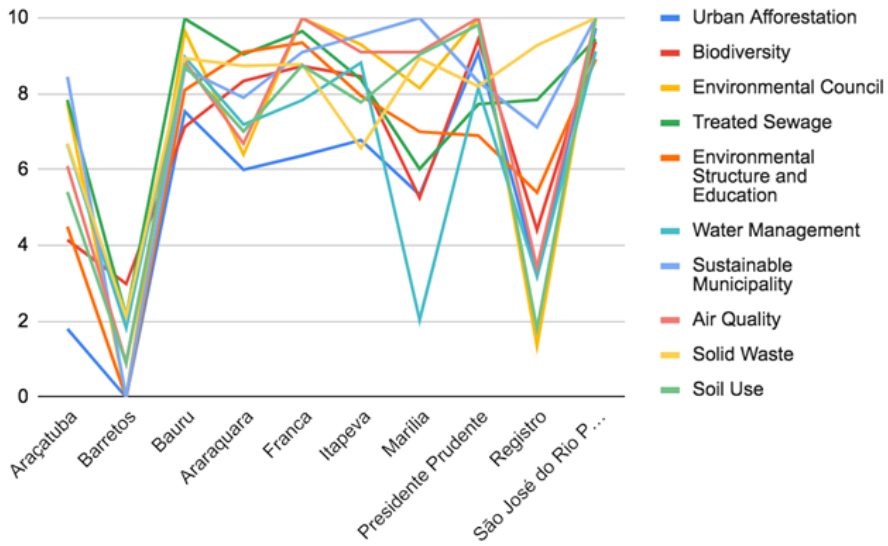

FIGURE 2 – Scoring of the Environmental Assessment Index Directives in 2020 in the selected Municipalities.
Source: Department of Infrastructure and Environment (SP), 2020. Prepared by the authors.

80 points. This fact changed in 2020, as shown in figure 2.

Another aspect to be highlighted is that in cities with fragile (with a score below eight points) or non-existent councils, the IAA results for the period were quite negative, tables 04 and 05 show this behavior.

Of the five cities that scored less than eight in the council directive, in 2019, four of them also failed to achieve the minimum score to qualify as cities with responsibilities towards the environment; therefore, they did not receive the VerdeAzul Municipality seal. Again, the exception was the municipality of Araraquara which, with a score of 6.65 points in the council directive, still achieved more than 80 points in the general calculation of the IAA, indicating good performance in some of the other directives and no deductions in the environmental liability item. However, for the year 2020, the municipality had a drop in performance in the IAA of 8.84%, compared to 2019, placing it in the group of municipalities that did not obtain the VerdeAzul Municipality seal, reinforcing the above, that low grades achieved by the council directive result in weakened IAA's. It is also noteworthy that Araraquara presented the worst performance, from 2019 to 2020, among the cities analyzed (table 06). For the 2020 data, of the five cities that did not achieve 80 points, four of them had the council directive below eight points.

When analyzing the correlation coefficient, the data showed a strong or very strong positive correlation in the entire set in both years analyzed. The correlation coefficient can vary from -1 to 1. When closer to -1 the correlation is negative, that is, as one variable increases, the other variable de-

TABLE 4 - Scores of the ten directives of the Environmental Assessment Index for the year 2019.

Administrative Headquarters	IAA (2019)	Urban Afforestation	Biodiversity	Environmental Council	Treated sewage	Environmental Str. and Edu.	Water Management	Sustainable Municipality	Air Quality	Solid Waste	Soil Use
Araçatuba	40.55	0.8	2.67	6.75	4.49	3	4.27	4.65	4.02	6.29	3.61
Barretos	10.21	0.00	2.65	0.00	2.18	0.00	1.33	0.00	0.90	2.25	0.90
Bauru	81.20	7.36	6.63	10	7.82	8.20	8.57	8.05	6.40	8.52	9.65
Araraquara	83.82	7.06	8.49	6.65	8.26	10	7.44	9.25	9.82	9.64	7.21
Franca	91.97	6.37	10	10	8.64	9.35	8.73	10	10	9.23	9.65
Itapeva	82.16	6.78	9.44	10	8.53	6.45	8.82	8.8	9.82	6.77	6.75
Marília	7.86	0	1.67	0.00	0.27	0.00	2.04	0.00	0.90	2.08	0.90
Presidente Prudente	91.71	9.93	9.25	10	7.77	9.20	8.85	8.8	10	8.81	9.10
Registro	10.06	0	3.33	0.00	1.79	0.00	1.43	0.00	0.90	1.71	0.90
São José do Rio Preto	97.00	9.68	9.20	10	9.99	10	8.58	9.55	10	10	10

SOURCE: Department of Infrastructure and Environment (SP), 2020. Prepared by the authors.

TABLE 5 - Correlation Index between the council directive and the 2019 Environmental Assessment Index and the other directives.

Directives	Councils	IAA
Afforestation	0.880182774	0.9588292089
Biodiversity	0.8524231239	0.9461489771
Treated sewage	0.9395675436	0.9831105968
Structure and Education	0.8983928102	0.9827043627
Water management	0.9694583716	0.9868128367
Sustainable municipality	0.955919833	0.9921138573
Air quality	0.9083160102	0.9768007244
Solid waste	0.9200607733	0.9667561914
Soil use	0.9436789002	0.9768900506

SOURCE: Department of Infrastructure and Environment (SP), 2020. Prepared by the authors.

creases. When closer to 1 the correlation is positive, that is, if one variable increases, the other also tends to increase. When the coefficient is close to zero, there is no correlation between the variables. Table 07 presents the correlation coefficient between the councils directive and the other directives, showing the positive linearity in all, both in 2019 and in 2020. Although all showed a positive correlation, there were variations within the set, making it possible to verify a coefficient of 0.58 in the solid waste directive in 2020, up to 0.99 for air quality in the same year. However, on average, the strong correlation was evident. The mean correlation coefficient in 2019 was 0.92 and in 2020 it was 0.83. Even if it is not possible to establish a direct causal relationship between the council directive and the other directives, the analysis suggests that the existence

TABLE 6 - Evolution of the Environmental Assessment Index for the years 2019 and 2020.

	IAA		
Administrative Headquarters	**2019**	**2020**	**Evolution**
Araçatuba	40.55	59.36	46.39%
Barretos	10.21	10.88	6.56%
Bauru	81.2	81.57	0.46%
Araraquara	83.82	76.41	-8.84%
Franca	91.97	88.56	-3.71%
Itapeva	82.16	82.70	0.66%
Marília	7.86	70.89	801.91%
Presidente Prudente	91.71	87.58	-4.50%
Registro	10.06	47.10	368.19%
São José do Rio Preto	97.00	96.61	-0.40%

SOURCE: Department of Infrastructure and Environment (SP), 2020. Prepared by the authors.

TABLE 7 - Comparison of the scores of the Environmental Council directive in the years 2019 and 2020.

	Environmental Council	
Administrative Headquarters	**2019**	**2020**
Araçatuba	6.75	7.75
Barretos	0.00	0.00
Bauru	10	9.65
Araraquara	6.65	6.40
Franca	10	10
Itapeva	10	9.3
Marília	0.00	8.15
Presidente Prudente	10	10
Registro	0.00	1.35
São José do Rio Preto	10	10

SOURCE: Department of Infrastructure and Environment (SP), 2020. Prepared by the authors.

of environmental councils in municipalities results in better overall grades.

The study data allow two explanatory inferences:

1) municipal administrations committed to the quality of urban life and that have a strong commitment to democracy, also show greater general concern with issues related to environmental issues. There are, therefore, greater efforts for improvement in different dimensions that affect all directives;

2) the variable referring to the role of the council is key in the normative composition of the index, since the council is the locus of discussion for all other directives, influencing them. The Municipal Environmental Council also has the prerogative of evaluating and validating the supporting documents relating to the VerdeAzul Municipality Program presented to the Department of Environment of São Paulo state. Furthermore, in order to obtain a score in the council directive, it is necessary for its members to participate in at least one meeting of the State Council for the Environment (CONSEMA) or of the VerdeAzul Municipality Program. The premise is that the presence of municipal councilors in these spaces allows access to a wider range of information and participation in debates, which can help to qualify discussions and decisions on the subject at the municipal level.

The observation of data from the set of cities studied shows that of the three cities that obtained a score of zero in the council directive, none managed to achieve a high IAA. The fragility of these councils may be a sign of the disarticulation of key actors in discussions around the theme of the environment, which could result in the failure to manage to bring the environmental debate into public management or, if it manages to enter

the agenda of the municipality, better qualify it.

From the set of quantitative data presented and considering the regulations of the VerdeAzul Municipality Program regarding the mandatory presence of active environmental councils, it can be inferred that the existence of this participatory institution plays an important role when faced with other environmental issues. This, in turn, has been reflected in the other directives that make up the IAA of each municipality. However, it is emphasized that in the present study there was no variable that would allow the data to be measured qualitatively; the focus was on the quantitative analysis of the directives that make up the PMVA, based on data compiled by the SMA of São Paulo state. Certainly, a qualitative study in relation to the councils, which takes minutes, interviews, participation in meetings, among other actions, as an object of analysis, could bring refinements that add to the analyses developed here.

5. Final considerations

When adopting a system of indicators such as the IAA as a reference for the analysis of a key dimension for public policies – the activity of municipal environmental councils - it is important to be clear about some aspects:

i) the IAA is a composite indicator, that is, it brings together several indicators in its composition;

ii) every social indicator corresponds to a set of variable choices and algorithms relative to its objectives and has a social and, it would not be an exaggeration to say, political nature.

As defended by Jannuzzi (2001), setting up a system of indicators involves methodological decisions, which can be summarized in four stages: ways of operating an abstract concept or a theme; ways of approaching and operating the concept, treated quantitatively; data source; and statistical work on the composition of the indicator. Knowing these steps is key to working with the indicator. Taking these characteristics, the structure of the IAA's formulation and the normativity that regulates it into consideration, it is possible to measure the extent of the results achieved with this study, as well as indicating the need for further studies that articulate the existence and functioning of the municipal environmental councils with results in different environmental dimensions in the municipality.

When we look back at the problem and the initial proposition of the study, which hypothesized that the existence of active municipal environmental councils would improve the results of the other environmental dimensions in the municipality, it was verified that this initial proposition proved to be correct. The organization and tabulation of the data, as well as the statistical operation with the correction coefficient, highlighted the great importance of the council directive in the variation of the other directives. Therefore, it is possible to say that the existence of municipal environmental councils can improve local public environmental policies.

However, even though the initial hypothesis was positive, this work suggests further studies:

i) a quantitative study using a significant sample in relation to the set of municipalities in the state of São Paulo, including the consideration of municipalities with different population sizes and positions in the urban hierarchy, and

ii) a qualitative analysis of the action of the councils, with the aim of validating the results achieved in this study.

As already noted, the main interest here was not to establish a direct causal relationship between the existence of councils and other directives, but to present a general picture of the behavior of the variables considered. The aim was to present a result that instigates the study of the processes that involve decision-making by the councils, which are certainly stimulating and permeated by actors, interests and movements not captured by this study.

The focus of this study was medium-sized cities that are regional headquarters in their respective administrative regions. Other research may focus on the dynamics and behavior of municipal environmental councils in cities in other positions within the urban hierarchy and, also, in a regionalized way, relating them to the IAA. Undoubtedly, positioning the councils and understanding their capillarity and impact on local public policies is fundamental for the environmental agenda and for studies on the effectiveness of these participatory instances in public policies, especially in a moment of democratic inflection, as has been experienced in Brazil in the second decade of the 21st century.

References

Abers, R. N.; Oliveira, M. S. de. Nomeações políticas no ministério do meio ambiente (2003-2013): interconexões entre ongs, partidos e governos. *Opinião Pública*, 21(2), 337-364, 2015.

Acselrad, H. Sentidos da sustentabilidade urbana. *In*: Acselrad, H. (Org.). *A duração das cidades*: sustentabilidade e risco nas políticas públicas. Rio de Janeiro: Lamparina, p. 43-70, 2009.

Almeida, C.; Tatagiba, L. Os conselhos gestores sob o crivo da política: balanços e perspectivas. *Serviço Social & Sociedade*, 109, 68-92, 2012.

Almeida, C.; Cayres, D.; Tatagiba, L. Balanço dos estudos sobre os conselhos de políticas públicas na última década. *Lua Nova*, 94, 255-294, 2015.

Almeida, D. C. R. Os desafios da efetividade e o estatuto jurídico da participação: a política nacional de participação social. Brasília: *Sociedade e Estado*, 32(3), 649-680, 2017.

Almeida, C; Martelli, C. G.; Coelho, R. Os papéis das instituições participativas na estruturação das políticas públicas no Brasil. *Revista Brasileira de Ciência Política*, 35, e244194, 1-36, 2021.

ANPR – Associação Nacional dos Procuradores da República. O papel do MPF no Conama e a importância da participação social em sua composição, 2021. Disponível em: <https://anpr.org.br/imprensa/noticias/25366-o-papel-do-mpf-no-conama-e-a-importancia-da-participacao-social-em-sua-composicao. Acesso em: fev. 2022.

Avritzer, L. A qualidade da democracia e a questão da efetividade da participação: mapeando o debate. *In*: Pires, R. R. (Org.). Efetividade das instituições participativas no Brasil: estratégias de avaliação. Brasília: IPEA, p. 14-37, 2011.

Avritzer, L.; Souza, C. H. L. (Orgs.). *Conferências nacionais*: atores, dinâmicas participativas e efetividade. Brasília: IPEA, 2013.

Beck, U. *Sociedade de risco*: rumo a uma outra modernidade. São Paulo: Editora 34, 2010.

Bello Filho, N. de B. Teoria do direito e ecologia: apontamentos para um direito ambiental no século XXI. *In*: Ferreira, H. S.; Leite, J. R. M. (Orgs.). *Estado de direito ambiental*: tendências, aspectos constitucionais e diagnósticos. Rio de Janeiro: Forense, 2004.

Branco, M. L. C. As cidades médias no Brasil. *In*: Spósito, E. S.; Spósito, M. E. B.; Sobarzo, O. (Org.). *Cidades médias*: produção do espaço urbano e regional. São Paulo: Expressão Popular, 2006.

Brasil. *Lei nº 6.938, de 31 de agosto de 1981*. Dispõe sobre

a Política Nacional do Meio Ambiente, seus fins e mecanismos de formulação e aplicação. Brasília: DOU de 2/9/1981.

Brasil. *Constituição da República Federativa do Brasil, de 5 de outubro de 1988*. São Paulo: Atlas, 11. ed. 1998.

Brasil. *Lei nº 12.305, de 02 de agosto de 2010.* Dispõe sobre a Política Nacional de Resíduos Sólidos. Brasília: DOU de 3/8/2010.

Brenner, N.; Schmid, C. La era urbana en debate. *Revista EURE*, 42(127), 307-339, 2016. doi: 10.4067/S0250-71612016000300013

Bulkeley, H.; Betsill, M. Rethinking sustainable cities: multilevel governance and the 'urban' politics of climate change. *Environmental Politics*, 14(1), 42-63, 2010. doi: 10.1080/0964401042000310178

Canotilho, J. J. G.; Leite, J. R. M. (Org.). Direito constitucional ambiental brasileiro. São Paulo: Saraiva, 2007.

Catelan, M. J. *Heterarquia urbana*: interações espaciais interescalares e cidades médias. São Paulo: Cultura Acadêmica, 2013. Disponível em: <http://hdl.handle.net/11449/109282>. Acesso em: out. 2020.

Chomsky, N.; Pollin, R. *Crise climática e o green new deal global*. Rio de Janeiro: Roça Nova, 2020.

Coelho, R. *et al*. A participação conselhista no Brasil: uma proposta de análise por meio do Índice de Potencial Participativo dos Conselhos nos municípios (IPPC). *In*: *Anais do Encontro Internacional Participação, Democracia e Políticas Públicas*. Porto Alegre, 10-13 de set., 2019.

Cortes, S. M. V. Arcabouço histórico-institucional e a conformação de conselhos municipais de políticas públicas. *Educar em Revista*, 25, 143-174, 2005.

Cortes, S. V.; Gugliano, A. Entre neocorporativistas e deliberativos: uma interpretação sobre os paradigmas de análise dos fóruns participativos no Brasil. *Sociologias*, 12(24), 44-75, 2010.

Diamond, J. *Colapso*: como as sociedades escolhem o fracasso ou o sucesso. Rio de Janeiro: Editora Record, 2005.

Ferreira, L. C. Dimensões humanas da biodiversidade: mudanças sociais e conflitos em torno de áreas protegidas no Vale do Ribeira, SP, Brasil. *Ambiente & Sociedade*, 7(1), 47-66, 2004.

Gheller, J. C. K. O novo constitucionalismo e sua aproximação com as políticas sociais, com ênfase no Programa Bolsa Família. *In*: Wolkmer, A. C.; Caovilla, M. A. L. (Orgs.). *Temas atuais sobre o constitucionalismo latino-americano*. São Leopoldo: Karywa, 2015.

Giddens, A. *As consequências da modernidade*. São Paulo: UNESP, 1991.

Gurza Lavalle, A.; Barone, L. Conselhos, associações e desigualdade. *In*: Arretche, M. (Org.). *Trajetórias das desigualdades*: quanto o Brasil mudou nos últimos cinquenta anos. São Paulo: Editora Unesp, 2015. p. 51-76

Gurza Lavalle, A.; Voigt, J.; Serafim, L. O que fazem os conselhos e quando o fazem? Padrões decisórios e o debate dos efeitos das instituições participativas. *Revista Dados*, 59(3), 609-650, 2016.

IBGE – Instituto Brasileiro de Geografia e Estatística. IBGE cidades: estimativa censo brasileiro de 2020. Rio de Janeiro: IBGE, 2020.

Jannuzzi, P. M. *Indicadores sociais no Brasil*: conceitos, fontes de dados e aplicações. Campinas: Editora Alínea, 2001.

Kates, R. W.; Wilbanks, T. J. Making the global local: responding to climate change concerns from the ground up. *Local Environment*, 45(3), 12-23, 2003.

Leite, J. R. M. *Dano ambiental*: do individual ao coletivo extrapatrimonial. São Paulo: Editora Revista dos Tribunais, 2000.

Leite, J. R. M. Sociedade de risco e estado. *In*: Canotilho, J. J. G.; Leite, J. R. M. (Org.). *Direito constitucional ambiental brasileiro*. São Paulo: Saraiva: 2007.

Leite, P. R. *Logística Reversa*. São Paulo: Prentice Hall, 2003.

Luchmann, L.; Almeida, C.; Gimenes, E. Associativismo e conselhos gestores no Brasil. *In*: Martelli, C.; Jardim, M. C.; Gimenes, E. (Orgs.). *Participação política e democracia no Brasil contemporâneo*. São Paulo: Cultura Acadêmica, 2018.

Luchmann, L.; Martelli, C. G., Taborda, L. Desafios do

orçamento participativo: um estudo no Brasil (Araraquara-SP) e em Portugal (Cascais). *Estudo sociológico*, 26(50), 213-251, 2021.

Machado, A. de Q. *Licenciamento ambiental*: atuação preventiva do estado à luz da Constituição da República Federativa do Brasil. Porto Alegre: Livraria do Advogado, 2012.

Marques, L. *Capitalismo e colapso ambiental*. Campinas, SP: Editora da UNICAMP, 2015.

Martelli, C.; Jardim, M. C.; Gimenes, E. (Orgs.). *Participação política e democracia no Brasil contemporâneo*. São Paulo: Cultura Acadêmica, 2018.

Martelli, C. G.; Coelho, R. Avaliar o quê? Os vários sentidos de efetividade no campo de estudos da participação. *Opinião Pública*, 27(2), 623-649, 2021.

Martelli, C. G.; Almeida, C.; Lüchmann, L. The meanings of representation and political inclusion in the conferences of public policies in Brazil. *Brazilian Political Science Review*, 13(1), 1-23, 2019.

Novicki, V.; Souza, D. B. Políticas públicas de educação ambiental e a atuação dos conselhos de meio ambiente no Brasil: perspectivas e desafios. *Avaliação de Políticas Públicas Educacionais*, 18(69), 711-736, 2010.

Nunes, M. R.; Philippi Jr. A.; Fernandes, V. A atuação de conselhos do Meio Ambiente na gestão ambiental local. *Saúde e Sociedade,* 21(3), 48-60, 2012.

ONU – Organização das Nações Unidas. Transformando nosso mundo: a agenda 2030 para o desenvolvimento sustentável. 2015. Disponível em: <https://brasil.un.org/>. Acesso em: nov. 2020.

ONU – Organização das Nações Unidas. *New urban agenda*. Plano urbano de Quito. A/RES/71/256, 2017.

Orsi, R. A. Problemas socioambientais e a dimensão política do espaço. *Revista do Programa de Pós-graduação da Universidade Federal Fluminense - GEOgraphia*, 18(36), 108-127, 2016. doi: 10.22409/GEOgraphia2016.v18i36

Paixão, M. O verde e o negro: a justiça ambiental e a questão racial no Brasil. *In*: Acselrad, H.; Herculano, S.; Pádua, J. A. (Orgs.). *Justiça ambiental e cidadania*. Rio de Janeiro: Relume Dumará, 2004. p. 159-168.

Pires, R. R. (Org.). *Efetividade das instituições participativas no Brasil*: estratégias de avaliação. Brasília, IPEA, 2011.

Ribeiro, W. C. Cidades ou sociedades sustentáveis? *In*: Carlos, A. F.; Carreras, C. (Orgs.). *Urbanização e mundialização*: estudos sobre a metrópole. São Paulo: Contexto, 2005.

Romão, W.; Martelli, C. G. Estudos sobre as instituições participativas: o debate sobre sua efetividade. *Revista Pensamento & Realidade*, 28(1), 124-143, 2013.

Romeiro, A. R. Evitar o colapso ambiental requer o fim do capitalismo? Resenha. *Revista Economia e Sociedade*, 28(1), 285-289, 2019. doi: 10.1590/1982-3533.2019v28n1art13.

Sanfeliu, C. B.; Tomé, J. M. L. Miradas a otros espacios urbanos: las ciudades intermédias. *Revista electrónica de geografia y ciências sociales*, 8(165), 2004. Disponível em: <http://www.ub.es/geocrit/sn/sn-165.htm>. Acesso em: out. 2020.

São Paulo. *Resolução SMA nº 33, de 28 de março de 2018*. Estabelece procedimentos operacionais e parâmetros de avaliação da qualificação no âmbito do Programa Município VerdeAzul. São Paulo, 2018. Disponível em: <https://www.infraestruturameioambiente.sp.gov.br/legislacao/2018/03/resolucao-sma 33-2018/>. Acesso em: set. 2020.

Sathler, D. Repercussões locais das mudanças climáticas globais: urbanização, governança e participação comunitária. *Caminhos de Geografia*, 15(51), 2014. Disponível em: <https://seer.ufu.br/index.php/caminhosdegeografia/article/view/26626>. Acesso em: jan. 2022.

Secretaria de Infraestrutura e Meio Ambiente. As pontuações do Programa Município VerdeAzul, São Paulo, 2020. Disponível em: <https://www.infraestruturameioambiente.sp.gov.br/verdeazuldigital/pontuacoes/>. Acesso em: set. 2020.

Secretaria de Infraestrutura e Meio Ambiente. Programa Município VerdeAzul: O Programa. 2020. Disponível em: <https://www.infraestruturameioambiente.sp.gov.br/verdeazuldigital/o-projeto/>. Acesso em: set. 2020.

Sposito, M. E. B.; Elias, D.; Soares, B. R. (Orgs.). *Agentes econômicos e reestruturação urbana e regional* - Passo Fundo e Mossoró. São Paulo: Expressão Popular, 2010.

Tatagiba, L. Os conselhos gestores e a democratização das políticas públicas no Brasil. *In*: Dagnino, E. (Ed.). *Sociedade civil e espaços públicos no Brasil*. São Paulo: Paz e Terra, 2002, p. 47-103.

Teixeira, A. C. C.; Souza, C. H. L. de; Lima, P. *Arquitetura da participação no Brasil*: uma leitura das representações políticas em espaços participativos nacionais. Brasília: IPEA, 2012.

Wolkmer, A. C.; Fagundes, L. M. Tendências contemporâneas do constitucionalismo latino-americano: estado plurinacional e pluralismo jurídico. *Pensar: Revista de Ciências Jurídicas*, 16(2), 371-408, 2011.doi: 10.5020/23172150.2012.371-408

Wolkmer, A. C.; Melo, M. P. (Org.). *Constitucionalismo latino-americano*: tendências contemporâneas. Curitiba: Juruá, 2013.

Zorzal, G.; Carlos, E. Audiências públicas do legislativo estadual: fatores endógenos e exógenos na análise da efetividade da participação. *Revista de Sociologia e Política,* 25(64), 23-46, 2017.