

Structural processes and alternative means of conflict resolution as solutions to traditional environmental processes¹

Elen Pessoa de Queiroz Ribeiro

Mestre em Ciências Ambientais, Universidade Federal de São Carlos, Brasil

elen_pessoa@hotmail.com

<https://orcid.org/0000-0001-9220-4251>

Celso Maran de Oliveira

Professor Doutor, Universidade Federal de São Carlos, Brasil.

celmaran@ufscar.br

<https://orcid.org/0000-0002-6442-3614>

Ozelito Possidônio de Amarante Júnior

Professor Doutor, Instituto Federal do Maranhão, Brasil.

ozelito@ifma.edu.br

<https://orcid.org/0000-0001-9604-9463>

Submissão: 09/08/2025

Aceite: 30/12/2025

RIBEIRO, Elen Pessoa de Queiroz; OLIVEIRA, Celso Maran de; AMARANTE JÚNIOR, Ozelito Possidônio de. Processos estruturais e meios alternativos de resolução de conflitos como soluções aos processos ambientais tradicionais. **Periódico Eletrônico Fórum Ambiental da Alta Paulista**, [S. l.], v. 22, n. 1, p. e2509, 2026.

DOI: [10.17271/1980082722120266218](https://doi.org/10.17271/1980082722120266218). Disponível

em: https://publicacoes.amigosdanatureza.org.br/index.php/forum_ambiental/article/view/6218.

Licença de Atribuição CC BY do Creative Commons: <https://creativecommons.org/licenses/by/4.0/>

¹This work was carried out with the support of the São Paulo Research Foundation (FAPESP) - Process No. 2022/16459-1

Processos estruturais e meios alternativos de resolução de conflitos como soluções aos processos ambientais tradicionais

RESUMO

Objetivo - Apresentar e discutir alternativas viáveis que podem superar os obstáculos inerentes aos processos judiciais tradicionais e, em específico, às lides ambientais.

Metodologia - Pesquisa bibliográfica, que consistiu na consulta da literatura e textos jurídicos doutrinários.

Originalidade/relevância - Na seara ambiental, as formas tradicionais do processo civil não seriam adequadas: as características do dano ambiental exigem outra forma de pensar.

Resultados - Foi possível entender que os processos estruturais se mostram mais apropriados para a resolução de litígios ambientais complexos, além de possibilitarem a flexibilização dos procedimentos adotados para o tratamento do problema. Já os meios alternativos de solução de conflitos na seara ambiental, previstos no artigo 8.º do Acordo de Escazú, consistem em mecanismos, como a mediação e a conciliação e a arbitragem, para resolver as controvérsias.

Contribuições teóricas/metodológicas - A complexidade das lides ambientais demanda a superação dos entraves relacionadas às normas processuais tradicionais. Ademais, o uso destas alternativas aos processos judiciais tradicionais somente se mostrará efetivo se estiver condicionado à ampla participação, principalmente da sociedade e, em especial, dos grupos diretamente afetados pelo problema/objeto ambiental em questão.

Contribuições sociais e ambientais - Os processos estruturais ambientais possuem o condão de trazer reformas/mudanças no *status quo*, porém esse potencial é pouco explorado por parte do poder judiciário. Ainda, o uso dos meios alternativos de conflitos, conciliação, mediação e arbitragem, poderia ser um meio viável para superar obstáculos como a demora no processo tradicional e as disparidades, econômicas e sociais, entre as partes envolvidas.

PALAVRAS-CHAVE: Acesso à justiça. Processo estrutural. Métodos alternativos.

Structural processes and alternative means of conflict resolution as solutions to traditional environmental processes

2

ABSTRACT

Objective - To present and discuss viable alternatives that can overcome the obstacles inherent in traditional legal proceedings, specifically in environmental disputes.

Methodology - Bibliographic research, which consisted of consulting literature and legal doctrinal texts.

Originality/relevance - In the environmental field, traditional forms of civil proceedings would not be adequate: the characteristics of environmental damage require a different approach.

Results - It was concluded that structural processes are more appropriate for resolving complex environmental disputes, in addition to allowing for flexibility in the procedures adopted to address the problem. Alternative means of dispute resolution in the environmental field, provided for in Article 8 of the Escazú Agreement, consist of mechanisms such as mediation, conciliation, and arbitration to resolve disputes.

Theoretical/methodological contributions - The complexity of environmental disputes demands overcoming the obstacles associated with traditional procedural norms. Furthermore, the use of these alternatives to traditional judicial processes will only be effective if they are conditioned on broad participation, particularly from society and from groups directly affected by the environmental problem/object in question.

Social and environmental contributions - Structural environmental processes have the potential to bring about reforms/changes to the status quo, but this potential is explored little by the judiciary. Also, the use of alternative dispute resolution methods—conciliation, mediation, and arbitration—could be a viable means of overcoming obstacles such as the length of traditional processes and the economic and social disparities between the parties involved.

KEYWORDS: Justice access. Structural process. Alternative methods.

Procesos estructurales y medios alternativos de resolución de conflictos como soluciones a los procesos ambientales tradicionales

RESUMEN

Objetivo – Presentar y discutir alternativas viables que permitan superar los obstáculos inherentes a los procedimientos judiciales tradicionales, específicamente en controversias ambientales.

Metodología – Investigación bibliográfica, que consistió en la consulta de literatura y textos doctrinales.

Originalidad/Relevancia – En el ámbito ambiental, las formas tradicionales de procedimientos civiles no serían adecuadas: las características del daño ambiental requieren un enfoque diferente.

Resultados – Se concluyó que los procesos estructurales son más apropiados para resolver controversias ambientales complejas, además de permitir flexibilidad en los procedimientos adoptados para abordar el problema. Los medios alternativos de resolución de controversias en el ámbito ambiental, previstos en el Artículo 8 del Acuerdo de Escazú, consisten en mecanismos como la mediación, la conciliación y el arbitraje para resolver disputas.

Contribuciones Teóricas/Metodológicas – La complejidad de las controversias ambientales exige superar los obstáculos asociados a las normas procesales tradicionales. Asimismo, el uso de estas alternativas a los procesos judiciales tradicionales solo será eficaz si se basa en una amplia participación, en particular de la sociedad y, en particular, de los grupos directamente afectados por el problema/objeto ambiental en cuestión.

Contribuciones Sociales y Ambientales – Los procesos ambientales estructurales tienen el potencial de generar reformas o cambios en el statu quo, pero este potencial es poco explorado por el poder judicial. Además, el uso de métodos alternativos de resolución de disputas —conciliación, mediación y arbitraje— podría ser un medio viable para superar obstáculos como la duración de los procesos tradicionales y las disparidades económicas y sociales entre las partes involucradas.

PALABRAS CLAVE: Acceso a la justicia. Proceso estructural. Métodos alternativos.

1 INTRODUCTION

Considering the importance of environmental protection and the need to ensure access to justice, this article aims to present and discuss viable alternatives capable of overcoming the obstacles inherent to traditional judicial proceedings and, more specifically, to environmental litigation.

In Brazil, access to justice is recognized as a fundamental right and is enshrined in Article 5, item XXXV, of the 1988 Federal Constitution (CF/1988). In the environmental sphere, this right enables individuals to resort to the judiciary to monitor and review administrative acts of the public authorities, whether by action or omission, thereby ensuring that their rights are upheld (Ferraresi; Carvalho, 2011). For such right to be effectively realized, the efficient provision of judicial protection is required: procedural mechanisms must be adequate so that fair and reasonable decisions are rendered to rights-holders (Gonzaga; Labruna; Aguiar, 2020; Lucena, 2023).

However, the right of access to justice is subject to several obstacles, among which those of a temporal, economic, and psychological nature deserve particular attention. Procedural delay in achieving the desired outcome constitutes a temporal barrier. Judicial system is complex and allows for multiple avenues of appeal, while the limited number of judges and civil servants to respond to the high demand placed upon the judiciary are among the factors contributing to such delays (Pinho; Silva, 2020).

Silva and Lunelli (2023) emphasize that, given the irreversible or difficult-to-remedy nature of environmental harm, time becomes a key element in the duration of judicial proceedings. The authors argue that environmental protection depends on the interpretation that judges attribute to the legal text. They further note: "The disregard for due process in environmental cases constitutes a reiteration of inexplicable omissions from a legal standpoint".

In addition to the time required for the resolution of disputes, another obstacle concerns economic constraints. Expenditures related to legal representation, court fees, and costs associated with the filing of appeals, among others, may be sufficiently high to constitute a barrier to access to justice (Pinho; Silva, 2020).

High procedural costs, combined with temporal procedural barriers, ultimately hinder access to justice, such that financially vulnerable individuals may find themselves prevented from asserting their rights (Pinho; Silva, 2020).

It is also necessary to mention obstacles of a sociocultural nature. The 'legal capacity' of each individual varies considerably according to their level of knowledge and schooling. In other words, legal capacity is related not only to a person's financial conditions but also to their ability to identify their rights and potential violations thereof. Thus, an individual's level of schooling may likewise constitute a barrier to access to justice (Pinho; Silva, 2020).

It is also worth mentioning the so-called "habitual litigants" (such as large organizations), who hold a clear advantage over "occasional" or individual litigants. Habitual litigants possess greater experience, as they simultaneously take part in multiple similar proceedings. In addition to benefiting from economies of scale and from the ability to spread risk, they are able to test different defense strategies to determine which are more likely to be accepted by the courts. Occasional or individual litigants, by contrast, are those with little or no

experience or contact with the legal system. It is evident that habitual litigants are in a more advantageous position than occasional litigants, who possess less knowledge and ultimately face psychological and cultural barriers (Pinho; Silva, 2020).

In addition to the barriers previously mentioned, it is also important to identify the legal obstacles that hinder, or even render unfeasible, environmental damage remediation. Merely conceptual or normative issues, as well as the limitations on administrative, civil, and criminal jurisdiction spheres, contribute to preventing environmental harm from being effectively remedied (Felício; Silva, 2013).

It should be emphasized that these obstacles disproportionately affect the poorest segments of the population (Browne; McKeown, 2021), whether due to a lack of knowledge regarding their own rights or to the inability to protect them. Moreover, even when such knowledge is present, insufficient financial resources may constitute an additional barrier, rendering access to justice ineffective in such cases (Dilay; Diduck; Patel, 2020; Pinho; Silva, 2020; Pandiangan; Koeswidi; Silitonga, 2021).

In the environmental sphere, the right of access to justice is enshrined in the Regional Agreement on Access to Information, Public Participation and Access to Justice in Environmental Matters in Latin America and the Caribbean (known as Escazú Agreement), adopted on 4 March 2018 in Escazú, Costa Rica, to which Brazil is a signatory. Its purpose is to implement the rights of access to information, public participation, and access to justice in environmental matters in Latin America and the Caribbean (Bezerra; Tassigny, 2023; Sharman, 2023; López-Cubillos et al., 2021). One of the objectives of this Agreement is to strengthen access to justice in environmental matters. Article 8 provides that each State shall guarantee access to justice in environmental issues, establishing legal procedures and enabling public participation in decision-making (UNICEF, 2020).

At the national level, environmental claims may proceed within the administrative sphere (before environmental agencies that form part of the National Environmental System); in the course of a Civil Inquiry initiated by the Public Prosecutor's Office; or through judicial proceedings before state or federal courts (Oliveira, 2022).

Access to justice means that individuals possess legal instruments that may be used to obtain judicial control over potential violations of national environmental laws. Therefore, in addition to being directly related to public participation, it concerns the capacity of the public to compel the enforcement of environmental legislation (Ruppel; Houston, 2023; Parola, 2017).

Given the importance of the topic, for the preparation of this paper, a bibliographic review was conducted, an essential methodological step for the development of scientific research, as it allows for a more detailed understanding of the phenomena under examination and helps to identify possible inconsistencies or contradictions (Sousa; Oliveira; Alves, 2021). Accordingly, the relevant literature on the subject was consulted, together with doctrinal legal texts, which contributed to the formulation of the present study. Within the legal field, the purpose of a literature review is to survey available works, enabling the researcher to select those most pertinent to the inquiry and to deepen the corresponding theoretical understandings (Pinheiro; Francischetto, 2019).

2 STRUCTURAL PROCESSES

Almeida and Aires (2022) argue that traditional forms of civil procedure are not suitable for resolving environmental disputes. According to the authors, although the purpose of judicial proceedings is the protection of rights, the particularities of environmental harm require a different way of thinking. Another argument raised by the authors is that traditional procedural mechanisms are designed to safeguard rights arising from individual situations, and are therefore inadequate for multipolar and complex litigation.

In addition, the Judiciary frequently proves unable to adequately and simultaneously protect a group or a large number of individuals whose fundamental rights have been violated. In this regard, structural decisions constitute a means of resolving such claims, insofar as what is sought through structural adjudication is the implementation or restructuring of an organization that finds itself in a situation of structural imbalance, whether due to unlawful practices or to conditions that fall short of an ideal institutional standard (Bambirra; Brasil, 2021).

A 2018 study conducted by the National Council of Justice (CNJ), based on interviews with judges, identified a series of obstacles that ultimately compromise the procedural progress of collective actions: lack of celerity; complexity of proceedings and plurality of parties; procedural formalism and bureaucracy; difficulties related to enforcement; filing of individual actions for enforcement; insufficient training of court staff; lack of infrastructure and excessive workload; shortage of specialized technical personnel; high evidentiary costs; lack of commitment by the parties; multiplicity of proceedings on the same matter; difficulties in producing evidence; and the use of collective actions for political purposes (Ribeiro, 2024).

Described issues reaffirm the existence of inherent limitations in traditional procedural mechanisms when applied to more complex disputes, such as those involving collective actions. Structural proceedings prove to be more suitable for the resolution of complex environmental litigation, in addition to allowing greater flexibility in the procedures adopted to address the underlying problem (Almeida; Aires, 2022). Litigation concerning the protection of fundamental rights that are structurally violated requires commitment and active engagement by the parties, as well as a judicial approach that enables judges to form their understanding without disregarding the different perspectives involved in the case (Bambirra; Brasil, 2021).

Structural proceedings originated in 1954 with the case *Brown v. Board of Education of Topeka*. On that occasion, the United States Supreme Court held that the admission of students to public schools based on a system of racial segregation was unconstitutional. With this ruling, the Supreme Court initiated a process that brought about profound changes in the U.S. public education system. The decision was subsequently applied in other cases, such that the United States Judiciary, through its decisions, implemented extensive structural reforms in certain bureaucratic institutions with the aim of ensuring compliance with specific constitutional values (Didier Junior; Zaneti Junior; Oliveira, 2020).

Structural proceedings concept arises when what is at stake is a violation or non-conformity that occurs in a continuous and even structured manner, which may be exemplified as: (a) a situation of continuous and permanent unlawfulness; or (b) a situation of non-conformity that, although lawful, does not correspond to what would be considered ideal. In other words, a structural problem emerges from a situation that requires restructuring or

reorganization (Didier Junior; Zaneti Junior; Oliveira, 2020). In this sense, structural actions are intended to correct failures that violate the rights and guarantees of a plurality of individuals. Such instruments demand complex solutions that cannot be defined by judges alone (Bezerra; Mota, 2023).

In general terms, structural proceedings develop as follows: (a) discussion of a structural problem or situation of structured non-conformity; (b) pursuit of a restructuring of the problem situation, through progressive institutional changes; (c) development of a bifurcated procedure (identification of the problem and formulation of a restructuring plan); (d) procedural flexibility, including the possibility of adopting atypical forms of third-party intervention and executive measures; and (e) use of judicial cooperation and consensual mechanisms (Didier Junior; Zaneti Junior; Oliveira, 2020).

Given the complexity and multipolarity that generally characterize structural proceedings, as well as the potential of judicial decisions to affect a large number of individuals, it becomes necessary to consider the admission of *amicus curiae* (Brasil, 2021), for example, and the scheduling of public hearings. At this point, it is worth noting that traditional forms of intervention are not sufficient to ensure broad participation in structural proceedings. In addition, it is important to adopt atypical means of evidence, already provided for in Article 369 of the Brazilian Code of Civil Procedure (CPC/2015), as well as techniques of judicial cooperation (Didier Junior; Zaneti Junior; Oliveira, 2020).

Bezerra and Tassigny (2023) describe structural proceedings as an instrument capable of transforming the systemic or structural problem of access to environmental information in the country. In the authors' words, a comprehensive process is required, one that identifies such failures and calls upon the other branches of government to engage in dialogue with a view to realizing fundamental rights. According to the authors, through joint action among the Legislative, Executive, and Judiciary, coordinated by the latter, it would be possible to initiate a structural proceeding and alter this scenario of misinformation. Thus, the procedural flexibility adopted in structural proceedings, particularly with regard to the production of evidence, should be regarded as an intrinsic feature of environmental proceedings, as it would prevent such cases from being prematurely extinguished, enable a greater number of interested parties and technical experts to be heard, and thereby allow judges to conduct environmental disputes with greater efficiency.

3 ALTERNATIVE MECHANISMS FOR RESOLVING ENVIRONMENTAL DISPUTES

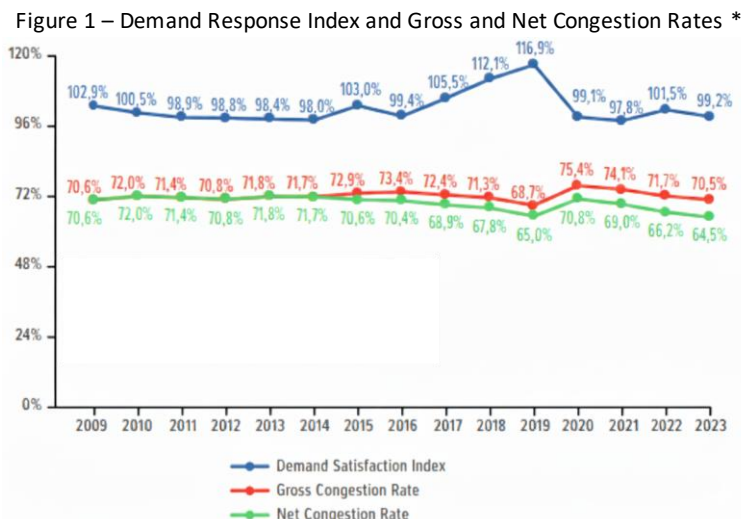
Alternative dispute resolution mechanisms in environmental matters are provided for in Article 8 of the Escazú Agreement, which establishes alternative mechanisms such as mediation and conciliation, among others, for the settlement of disputes (UNESCO, 2020). Paragraph 7 of that Article sets forth the possibility for the parties to promote mechanisms that are preliminary or alternative to traditional proceedings, bringing several benefits, such as preventing the escalation of conflict and enabling the achievement of solutions that are broadly accepted (Guanipa; Parola, 2023).

Godoy and Neres (2020) and Alkhayer, Gupta and Gupta (2022) argue that the rationale behind advocating for the use of alternative dispute resolution mechanisms is to avoid excessive

proceduralism and formalism. According to the authors, growing litigiousness, cases accumulation, qualified personnel shortage, and structural problems within the Judiciary, factors that ultimately produce slowness and inefficiency, undermine cases processing before the courts, compromise the principle of the 'reasonable' duration of proceedings, and prevent the 'due process of law' from being guaranteed to the parties. It should be emphasized that the 'reasonable time' requirement must be understood as the best possible duration necessary to adequately obtain a solution to the dispute, allowing for an effective conclusion consistent with the principle of access to justice (Godoy; Neres, 2020).

Certain facts about the Brazilian Judiciary that affect procedural celerity were presented in the 2024 edition of the "Justice in Numbers" report. According to the study, there are nine judges per one hundred thousand inhabitants, which represents half the number of judges found in European countries, where the ratio is eighteen judges per one hundred thousand inhabitants. The report also highlights the large number of single-judge courts: there are 1,908 local jurisdictional units located throughout Brazilian judicial districts, each with only one first-instance court division, and with competence to adjudicate all types of cases (Brasil, 2024).

That report also presents data regarding the Demand Response Index (*Índice de Atendimento à Demanda* – IAD), which measures the system's capacity to cope with the influx of new cases, and the Congestion Rate, which is used to assess the proportion of pending cases in relation to the total number of cases. Figure 1 shows the historical evolution of these indicators at the national level for the period from 2009 to 2023:



* Net Congestion Rate: excludes cases that are suspended, stayed, or provisionally archived.

Source: figure extracted from Brasil (2024).

Although the Demand Response Index (IAD) appears positive (99.2% in 2023), the data still show that the courts continue to face challenges in closing more cases than the total number of new filings and in reducing procedural backlogs. Among the figures presented in the report, it is worth noting that in the São Paulo State Court of Justice (TJSP), the congestion rate reached 78.2% (Brasil, 2024).

Thus, alternative dispute resolution mechanisms may have the potential to ensure more efficient access to justice (Godoy; Neres, 2020; Pandiangan; Koeswidi; Silitonga, 2021;

Bittencourt; Toledo and Rocha, 2023). Lacerda (2021) identifies three of the main extrajudicial means of resolving environmental disputes within the Brazilian legal system: environmental mediation, environmental conciliation, and negotiation through the execution of Conduct Adjustment Agreements (*Termos de Ajustamento de Conduta* - TAC). However, it is also pertinent to include in this discussion the institution of arbitration, which is widely disseminated at the international level and used to settle environmental controversies between sovereign States (Coelho; Rezende, 2016).

In line with what the authors have stated, the Brazilian new Code of Civil Procedure (*Código de Processo Civil* - CPC) was structured with the aim of fostering the use of alternative dispute resolution mechanisms. Article 334 of the CPC provides that, once the initial complaint complies with the essential requirements and is not deemed inept, the judge shall schedule a conciliation or mediation hearing (Brasil, 2015). Conciliation and mediation institutions allow the parties to resolve disputes independently and definitively, whenever possible, thereby contributing to a swifter resolution of claims (Ribeiro, 2024).

Mediation may be either judicial or extrajudicial. Through mediation, a third party (or more than one) facilitates dialogue between the parties and assists them in identifying a solution to the dispute. All stakeholders involved in the conflict may take part in the mediation process, including Executive branch agencies, the Public Prosecutor's Office, the Public Defender's Office, directly affected individuals (when their identification is possible), and even third-sector organizations (Lacerda, 2021).

Laosattaya (2020) and Gayo (2022) identify several advantages of mediation in comparison with traditional judicial proceedings, particularly with respect to cost, effectiveness, time efficiency, procedural flexibility, and the possibility of broader discussions grounded in communication and collaboration, which fosters the empowerment of parties who become more actively engaged in the process.

It is the role of the mediator to facilitate dialogue between the parties involved in the dispute, enabling them to reach consensus and to define the most appropriate solution for the case. It should be emphasized that, in environmental mediations, due to the non-disposable nature of environmental interests and their public character, any solution reached by the parties must comply with the applicable legislation, and the agreement may concern the manner in which the duty of reparation is to be fulfilled, always taking into account the best interests of those involved. To support the definition of solutions to the conflict, technical studies and the assistance of experts may be requested (Lacerda, 2021).

If the mediation proves unsuccessful, a negative mediation record will be drafted, and the dispute will be redirected to be resolved through another method, typically through judicial proceedings resulting in a judgment issued by the court. However, if the mediation is successfully concluded, a positive mediation record will be drawn up, which must be submitted for judicial approval, following prior consultation with the Public Prosecutor's Office. This oversight exercised by the Judiciary and by the Public Prosecutor's Office aims to ensure that the environmental legal interest has been safeguarded in the agreement and that the relevant legislation has been duly observed. Once approved, the mediation record acquires the force of a judicially enforceable title (Lacerda, 2021).

Bittencourt, Toledo and Rocha (2023) emphasize the importance of proper training for mediators so that conflicts may be resolved effectively. Among the reasons identified by the authors, the following deserve particular attention: efficiency in conflict resolution; subject-matter expertise possession that enables the professional to understand the complexities involved; compliance with ethical principles; and the fact that a well-trained mediator has the potential to contribute to environmental access to justice.

Conciliation shares many similarities with mediation. The main difference between the techniques lies in the manner in which dialogue is conducted: a conciliator assumes a more active role than a mediator and may, for instance, propose solutions. Accordingly, the recommendation as to whether mediation or conciliation should be employed will depend on the context of the dispute and on the relationship between the parties involved (Lacerda, 2021).

In São Paulo State, Decree No. 64.456 of 10 September 2019 (which revoked Decree No. 60.342/2014) regulates the procedure for environmental infractions assessment and sanctions imposition within the State System for Environmental Quality Management, Protection, Control, and Development and the Proper Use of Natural Resources (SEAQUA). Together with Resolution No. 005/21 and Resolution No. 051/14, the decree established the State Environmental Conciliation Program within the Secretariat of the Environment. As noted by Zanquim Junior (2016), the program ensures that those subject to environmental penalties are afforded, in accordance with their rights, a conciliatory procedure carried out in decentralized venues dedicated to the assessment of environmental infractions. This regulation has conferred greater celerity to administrative proceedings, facilitated access to regulatory information, and contributed to the reparation of environmental damage.

That decree provides that the procedure shall commence with an environmental infraction notice issuance, drafted either by the Environmental Military Police or by the Coordination for Inspection and Biodiversity of the Secretariat for Infrastructure and the Environment. The person cited will be informed of the Environmental Infraction Notice and notified of the scheduling of a hearing termed an Environmental Assistance Session. At this session, the parties may execute an Environmental Recovery Commitment Term (*Termo de Compromisso de Recuperação Ambiental* – TCRA), where the restoration of environmental damage is feasible, or reach an agreement under the terms proposed, thereby producing an Environmental Conciliation (Zanquim Junior, 2016; São Paulo, 2019).

Based on research conducted by Zanquim Junior (2016) in São Paulo State, in which 417 Environmental Assistance Sessions were analyzed, the author found that 81 offenders executed the TCRA (19.42% of the cases), while 291 offenders entered into an Environmental Conciliation (69.78% of the cases). Furthermore, the author identified that, within the entire Environmental Conciliation Program of São Paulo State, a total of 2,490 TCRA had been executed, accounting for 18.9% of the cases processed. In light of these data, the author concluded that the administrative procedure of the Environmental Assistance Session, together with the Environmental Conciliation Program, has the potential to produce effective results for environmental protection and restoration, in addition to constituting a swift procedure that promotes debureaucratization and enables, to the extent possible, environmental liabilities and degraded areas reduction, considering the diffuse nature of environmental goods (Zanquim Junior, 2016).

TACs execution currently constitutes one of the main negotiation mechanisms for resolving environmental disputes, with the Public Prosecutor's Office as its principal user. A TAC is an agreement of extrajudicial legal nature entered into between legally entitled actors and individuals or legal entities that violate rights of a transindividual character (Lacerda, 2021).

That instrument was first incorporated into the Brazilian legal system by Law No. 8,069/1990 (Child and Adolescent Statute – ECA) for use in matters concerning children and adolescents. Subsequently, through Law No. 8,078/1990 (the Consumer Protection Code), paragraph 6 was added to article 5 of the Public Civil Action Law (Law No. 7,347/1985), providing that "the public bodies with standing may obtain from the interested parties commitments to adjust their conduct to legal requirements, subject to sanctions, and such commitments shall have the effect of extrajudicially enforceable titles" (Brasil, 1985).

It is important to note that, through the execution of a TAC, it is not possible to waive the legal obligations imposed on the offender, particularly with respect to environmental reparation duty. That agreement is generally executed in the form of a negotiation between the entitled public authority and the offending party. Once executed, and given its nature as an extrajudicial title, non-compliance with the obligations imposed allows for the filing of an enforcement action, thereby compelling the party to comply with what has been agreed (Lacerda, 2021).

Acting to enable and promote mediation and conciliation, the Judicial Centers for Conflict Resolution and Citizenship (CEJUSCs) help reduce the number of disputes and ensure access to justice, particularly for individuals in situations of greater vulnerability. Among the services offered to the public, pre-litigation and litigation mediation and conciliation hearings are noteworthy, in addition to walk-in assistance, through which appropriate guidance is provided (Duarte; Valério; Duarte, 2024).

Arbitration mechanism allows the parties to select a trusted third party, an arbitrator with specialized technical knowledge, who will resolve the dispute, and whose final decision must be respected by those involved. This instrument is provided for in the Vienna Convention for the Protection of the Ozone Layer, the United Nations Framework Convention on Climate Change, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, and the Convention on Biological Diversity (Coelho; Rezende, 2016).

Although widely used in the international context, in Brazil this mechanism only began to gain strength with the enactment of Law No. 9,307/1996, when judicial confirmation of the arbitral award was no longer required. From then on, the arbitrator's decision must be observed and complied with regardless of any judicial pronouncement (Coelho; Rezende, 2016).

Although it is an instrument of considerable relevance at the international level, its application within the national context remains subject to controversy. First, because under Article 1 of the aforementioned statute, a significant portion of legal scholarship understands that arbitration should only be applied in cases involving freely disposable property rights. Accordingly, it would not be possible to employ arbitration in environmental matters, since such matters concern rights over non-disposable public goods (Coelho; Rezende, 2016; Godoy; Neres, 2020).

However, it is important to note that, as occurs with TAC, widely used by the Public Prosecutor's Office, arbitration may only be employed to resolve issues concerning the manner

or deadlines for complying with obligations related to environmental remediation. In this way, the non-disposable nature of the right to an ecologically balanced environment remains preserved, since arbitration will address only the formal aspects of compliance with such obligations (Coelho; Rezende, 2016).

One final argument in favor of the use of arbitration in environmental matters concerns situations in which environmental damage also affects a specific group of individuals. In such cases, diffuse rights are simultaneously affected along with an individual right. Under these circumstances, arbitration could be considered a viable solution (Coelho; Rezende, 2016).

Moreover, Shao (2021) emphasizes that promoting transparency, ensuring the participation of affected parties, and appointing independent experts to take part in the proceedings may help alleviate concerns regarding the use of arbitration for resolving environmental disputes.

Considering the foregoing, and with a view to ensuring procedural celerity so as to guarantee due process and a reasonable duration of proceedings for the parties, the aforementioned alternative dispute resolution mechanisms should be more frequently regarded as legitimate means for resolving environmental disputes.

4 CONCLUSION

Environmental disputes complexity requires overcoming the obstacles associated with traditional procedural norms. Structural environmental proceedings have the potential to bring about genuine reforms or changes to the status quo; however, this potential remains scarcely explored by the judiciary.

Moreover, since environmental protection would constitute the ultimate objective to be achieved, the use of alternative dispute resolution mechanisms, conciliation, mediation, and arbitration, may offer a viable means to overcome obstacles such as delays inherent to traditional judicial proceedings and the economic and social disparities between the parties involved.

However, the application of these alternatives to traditional judicial procedures will only be effective if it is conditioned on broad participation, particularly from civil society and, in particular, from groups directly affected by the environmental issue at stake, so that their demands and concerns are truly taken into account in resolving the conflict.

BIBLIOGRAPHIC REFERENCES

ALKHAYER, Jaffar; GUPTA, Nitin; GUPTA, Chandra Mohan. Role of ADR methods in environmental conflicts in the light of sustainable development. **IOP Conference Series: Earth and Environmental Science**, v. 1084, p. 012057, 2022. DOI: 10.1088/1755-1315/1084/1/012057. Disponível em: <https://doi.org/10.1088/1755-1315/1084/1/012057>. Acesso em: 14 nov. 2024.

ALMEIDA, Kalil Sauaia Boahid Mello; AIRES, Naiane de Araújo Garcez. Teoria do risco, direito fundamental ao meio ambiente e processos estruturais: uma breve reflexão sobre danos ambientais e litígios complexos / risk theory, fundamental right of the environment and structural litigation. **Brazilian Journal Of Development**, [S.L.], v. 8, n. 7, p. 50598-50613, 12 jul. 2022. South Florida Publishing LLC. <http://dx.doi.org/10.34117/bjdv8n7-126>.

BAMBIRRA, Tamara Brant; BRASIL, Deilton Ribeiro. DIREITO FUNDAMENTAL AO MEIO AMBIENTE E O PROCESSO ESTRUTURAL COMO MEIO ADEQUADO PARA SUA TUTELA. **Revista de Direito Ambiental e Socioambientalismo**, [S.L.], v. 7, n. 1, p. 1-19, 2021.

BITTENCOURT, Márcio Teixeira; TOLEDO, Peter Mann de; ROCHA, Gilberto de Miranda. A mediação complexa: a regularização ambiental e urbanística, o direito animal e o patrimônio imaterial. **Revista Observatório de la Economía Latinoamericana**, Curitiba, v. 21, n. 8, p. 8989-9005, 2023. Disponível em: <https://doi.org/10.55905/oelv21n8-063>. Acesso em: 14 nov. 2024.p

BEZERRA, Andrea de Melo Girão Mota; MOTA, Mônica Tassigny. O processo estrutural como instrumento aplicado ao direito de acesso à informação ambiental no Brasil. **Revista Direito e Práxis**, Ahead of print, Rio de Janeiro, 2023. Disponível em: link para o artigo. Acesso em: 15 dez. 2023. DOI: 10.1590/2179-8966/2023/76825

BRASIL. Constituição (1988). Constituição Federal, de 1988. **Constituição da República Federativa do Brasil de 1988**. Brasília, DF, 05 out. 1988. Disponível em: http://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm. Acesso em: 15 nov. 2023.

BRASIL. Departamento de Pesquisas Judiciárias. Conselho Nacional de Justiça (org.). **Justiça em números 2024**. Brasília, 2043. 448 p. Disponível em: <https://www.cnj.jus.br/wp-content/uploads/2024/05/justica-em-numeros-2024.pdf>. Acesso em: 26 ago. 2024.

BRASIL. **Lei nº 6.347, de 24 de julho de 1985**. Brasília, DF, 24 jul. 1985. Disponível em: http://www.planalto.gov.br/ccivil_03/leis/l7347orig.htm. Acesso em: 14 dez. 2022.

BRASIL. **Lei nº 13105, de 16 de março de 2015**. Código de Processo Civil. Brasília, Disponível em: https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2015/lei/l13105.htm. Acesso em: 26 mar. 2024.

BRASIL. SUPERIOR TRIBUNAL DE JUSTIÇA. (org.). **Os amigos da corte**: requisitos para admissão, funções e limites, segundo a jurisprudência do STJ. requisitos para admissão, funções e limites, segundo a jurisprudência do STJ. 2021. Disponível em: <https://www.stj.jus.br/sites/portallp/Paginas/Comunicacao/Noticias/22082021-Os-amigos-da-corte-requisitos-para-admissao--funcoes-e-limites--segundo-a-jurisprudencia-do-STJ.aspx>. Acesso em: 03 abr. 2024.

BROWNE, Jude; MCKEOWN, Maeve (orgs.). **What Is Structural Injustice?** Oxford: Oxford University Press, 2021. Disponível em: <https://library.oapen.org/handle/20.500.12657/87508>. Acesso em: 14 nov.2024.

COELHO, Hebert Alves; REZENDE, Elcio Nacur. A arbitragem como instrumento alternativo de solução de conflitos decorrentes de danos ambientais. **Universitas Jus**, Brasília, v. 7, n. 3, p. 99-107, 2016.

CONSELHO NACIONAL DA JUSTIÇA. **Justiça Pesquisa Direitos e Garantias Fundamentais Ações Coletivas no Brasil**: temas, atores e desafios da tutela coletiva. Brasília: CNJ, 2018.

DIDIER JUNIOR, Fredie; ZANETI JUNIOR, Hermes; OLIVEIRA, Rafael Alexandria de. ELEMENTOS PARA UMA TEORIA DO PROCESSO ESTRUTURAL APLICADA AO PROCESSO CIVIL BRASILEIRO. **Revista dos Tribunais Online**, [S.L.], v. 303, p. 45-81, 2020. Revista de Processo.

DILAY, Ariane; DIDUCK, Alan; PATEL, Kirit. Environmental justice in India: a case study of environmental impact assessment, community engagement and public interest litigation. **Impact Assessment and Project Appraisal**, v. 38, n. 1, p. 16-27, 2020. DOI: 10.1080/14615517.2019.1611035. Disponível em: <https://doi.org/10.1080/14615517.2019.1611035>. Acesso em: 14 nov. 2024.

DUARTE, Júlia Garcia da Silva; VALÉRIO, Marco Aurélio Gumieri; DUARTE, João Paulo Pereira. Análise da atuação dos Centros Judiciários de Solução de Conflitos à luz da Agenda 2030. **Fórum Ambiental da Alta Paulista**, Associação Amigos da Natureza da Alta Paulista (ANAP), v. 20, n. 1, p. 509-519, 2024. Disponível em: https://publicacoes.amigosdanatureza.org.br/index.php/forum_ambiental/pt_BR/article/view/5285. Acesso em: 31 jul. 2025.

ESTEVES, Diogo *et al.* Acesso à Justiça em Tempos de Pandemia: o impacto global do covid-19 nas instituições político-jurídicas. **Revista Interdisciplinar de Sociologia e Direito**, Niterói, v. 22, n. 2, p. 147-170, 2020. Disponível em: <https://periodicos.uff.br/confluencias/article/view/43014/25369>. Acesso em: 14 nov. 2023.

FELÍCIO, Munir Jorge; SILVA, Fúlvia Letícia Perego. Dano ambiental: discussão sobre a tutela jurídica. **Fórum Ambiental da Alta Paulista**, v. 9, n. 5, p. 80-94, 2013. Associação Amigos da Natureza da Alta Paulista (ANAP). Disponível em: https://publicacoes.amigosdanatureza.org.br/index.php/forum_ambiental/pt_BR/art,bdyi+icle/view/570. Acesso em: 31 jul. 2025.

FERRARESI, Geraldo Jose; CARVALHO, Cesar Machado de. A agenda 21 e a elaboração de políticas públicas para a sustentabilidade urbana. **Fórum Ambiental da Alta Paulista**, Associação Amigos da Natureza da Alta Paulista (ANAP), v. 7, n. 4, p. 685-699, 2011. Disponível em: https://publicacoes.amigosdanatureza.org.br/index.php/forum_ambiental/pt_BR/article/view/144. Acesso em: 31 jul. 2025.

GAYO, Sabela. Resolving Environmental Dispute with Mediation Method. **International Asia of Law and Money Laundering**, v. 1, n. 1, p. 23-29, mar. 2022. P-ISSN 2829-1654. Disponível em: <https://iaml.or.id>. Acesso em: 14 nov. 2024.

GODOY, Sandro Marcos; NERES, Wilson André. EFETIVAÇÃO DA TUTELA DO MEIO AMBIENTE E RAZOÁVEL DURAÇÃO DO PROCESSO, UMA PERSPECTIVA DOS MEIOS ALTERNATIVOS DE SOLUÇÃO QUE A ASSEGURE. **RJLB**, [s. l.], v. 2, p. 1277-1300, 2020.

GONZAGA, Alvaro de Azevedo; LABRUNA, Felipe; AGUIAR, Gisele Pereira. O Acesso à Justiça pelos Grupos Vulneráveis em Tempos de Pandemia de Covid-19. **Revista Humanidades e Inovação**, Palmas, v. 7, n. 19, p. 49-61, 2020. Disponível em: <https://revista.unitins.br/index.php/humanidadesinovacao/article/view/3714>. Acesso em: 14 nov. 2023.

GUANIPA, Henry Jiménez; PAROLA, Giulia. ACCESO A LA JUSTICIA EN ASUNTOS AMBIENTALES. In: GUANIPA, Henry Jiménez *et al* (ed.). **COMENTARIO AL ACUERDO DE ESCAZÚ**: sobre derechos ambientales en américa latina y el caribe. Bogotá: Konrad Adenauer Stiftung, 2023. p. 256-307.

LACERDA, Raul Altran. **Reflexões sobre a utilização dos métodos de conciliação, mediação e negociação em conflitos ambientais no Brasil**. 2021. 76 f. TCC (Graduação) - Curso de Direito, Departamento de Direito Processual da Faculdade de Direito da Universidade de São Paulo – FDUSP, Universidade de São Paulo (USP), [S.L.], 2021.

LAOSATTAYA, Jamras. **Development guidelines model of meditation on environmental disputes for the restoration of natural resources in Thailand**. 2020. Tese (Doutorado em Gestão Ambiental) – The Graduate School of Environmental Development Administration, Tailândia, 2020.

LÓPEZ-CUBILLOS, Sofía *et al*. The landmark Escazú Agreement: An opportunity to integrate democracy, human rights, and environmental conservation. **Conservation Letters**, v. 14, n. 1, p.1 a 13, 2021. DOI: 10.1111/conl.12838. Acesso em 14 nov. 2024

LUCENA, Victor Felipe Fernandes de. **Demandas Estruturais do Mínimo Existencial no Contexto da Jurisdição de Crise no Contexto da Jurisdição de Crise do Direito à Saúde, a Reserva do Possível e o Estado de Coisas Inconstitucionais**. São Paulo: Editora Dialética, 2023.

OLIVEIRA, Celso Maran de. REFLEXOS DA PARTICIPAÇÃO POLÍTICA SOBRE A TRILOGIA DE DIREITOS DA DEMOCRACIA AMBIENTAL. **Raduma Revista Americana de Urbanismo y Medio Ambiente**: Para Juristas y Técnicos, Madrid, n. 7, p. 89-136, jun. 2022. Disponível em: <https://www.ceda.ufscar.br/arquivos/raduma-7>. Acesso em: 16 dez. 2022.

PANDIANGAN, Leo Nora Elly AM.; KOESWIDI, Nanin; SILITONGA, Nort Retiana. How Can Environmental Dispute Resolution Be Resolved Without Going to Court. **Jurnal Hukum dan Peradilan**, v. 10, n. 2, p. 245-254, 2021. DOI: <https://doi.org/10.25216/jhp.10.2.2021.245-254>. Acesso em: 14 nov. 2024.

PAROLA, Giulia. **Democracia Ambiental Global**: direitos e deveres para uma nova democracia. Rio de Janeiro: -, 2017. 221 p.

PINHEIRO, Priscila Tinelli; FRANCISCHETTO, Gilsilene Passon. A pesquisa jurídica: para além da revisão bibliográfica. **Revista Jurídica Cesumar - Mestrado**, [S.L.], v. 19, n. 2, p. 429, 31 ago. 2019. Centro Universitário de Maringá. <http://dx.doi.org/10.17765/2176-9184.2019v19n2p429-457>.

RIBEIRO, Elen Pessoa de Queiroz. **Participação no judiciário:** (in)efetividade das ações populares e das ações civis públicas ajuizadas por associações na seara ambiental. 2024. Dissertação (Mestrado em Ciências Ambientais) – Universidade Federal de São Carlos, São Carlos, 2024. Disponível em: <https://repositorio.ufscar.br/handle/20.500.14289/20318>.

RUPPEL, Oliver; HOUSTON, Larissa Jane. The Human Right to Public Participation. *EPL - Europhysics Letters*, p. 125-138, 2023. DOI: 10.1209/0295-5075/53/239001. Acesso em: 14 out. 2024.

SHAO, Xuan. Environmental and Human Rights Counterclaims in International Investment Arbitration: at the Crossroads of Domestic and International Law. *Journal of International Economic Law*, v. 24, n. 1, p. 157-179, 2021. Disponível em: <https://academic.oup.com/jiel/article/24/1/157/6145949>. Acesso em: 14 out. 2024.

SHARMAN, Nicola. Objectives of public participation in international environmental decision-making. *International and Comparative Law Quarterly*, v. 72, p. 333-360, 2023. DOI: <https://doi.org/10.1017/S0020589323000088>. Acesso em: 14 nov. 2024

SILVA, Débora Bós; LUNELLI, Carlos Alberto. A efetividade da tutela jurisdicional do ambiente: uma reflexão sobre a duração razoável do processo ambiental. *Regit*, Itaquaquecetuba, v. 20, n. 2, p. 9-24, 29 out. 2023.

UNICEF (Fundo das Nações Unidas para a Infância). **Acordo de Escazú para jovens**. 2020. Disponível em: <https://www.unicef.org/lac/media/31676/file/Acordo-de-Escazu.pdf>. Acesso em: 06 abr. 2024.

ZANQUIM JUNIOR, José Wamberto. **A CONCILIAÇÃO AMBIENTAL E O ATENDIMENTO AMBIENTAL NO ESTADO DE SÃO PAULO**. 2016. 107 f. Dissertação (Mestrado) - Curso de Ciências Ambientais, Programa de Pós-Graduação em Ciências Ambientais, Universidade Federal de São Carlos, São Carlos, 2016. Disponível em: <https://repositorio.ufscar.br/handle/ufscar/7802>. Acesso em: 05 jul. 2024.

DISCLOSURES

AUTHOR CONTRIBUTIONS

This manuscript was developed from the master's dissertation carried out within the Graduate Program in Environmental Sciences (PPGCAM) at the Federal University of São Carlos (UFSCar) by the author Elen Pessoa de Queiroz Ribeiro, under the supervision of Professor Celso Maran de Oliveira and co-supervision of Professor Ozelito Possidônio de Amarante Junior. The work, funded by FAPESP through a master's scholarship, was produced by the author under the guidance of her advisors, who provided the necessary comments and textual revisions for its improvement. The translation of the manuscript into English was carried out by Professor Ozelito Possidônio de Amarante Junior.

DECLARATION OF COMPETING INTERESTS

We, **Elen Pessoa de Queiroz Ribeiro, Celso Maran de Oliveira and Ozelito Possidônio de Amarante Júnior**, hereby declare that the manuscript entitled "**Structural proceedings and alternative dispute resolution mechanisms as solutions to traditional environmental proceedings**":

1. **Financial Interests:** The authors have no financial interests that could influence the results or interpretation of the work. This study was funded by the São Paulo Research Foundation (FAPESP).
2. **Professional Relationships:** The authors have no professional relationships that could impact the analysis, interpretation, or presentation of the results. No professional relationships relevant to the content of this manuscript have been established.
3. **Personal Conflicts:** The authors have no personal conflicts of interest related to the content of the manuscript. No personal conflicts related to the content have been identified.