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Climate Change, Denialism, and Participatory Institutions in Brazil: Effects of the Bolsonaro Government's Environmental Strategy (2019-2022)*

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Understanding the impact of political and institutional factors on the fight against climate change has become increasingly important in the global debate on sustainability. From a political science perspective, it is crucial to research how different democratic institutions affect the development of climate policies. To contribute to this agenda, we discuss the role of participatory institutions in this policy sector. We offer a global literature review of cases where participatory mechanisms have helped improve the tools used to combat global warming. Next, we discuss the concept of climate denialism and examine the environmental policy of the Jair Bolsonaro administration in Brazil (2019-2022) and the dismantling of participatory bodies. This neoconservative government is an example of how limiting civil society's ability to oversee and regulate government policies helps to promote a climate denialist agenda. Finally, we conclude that enhancing participatory democracy is essential to improving climate change policies. However, this relationship also operates in reverse. Disrupting participatory mechanisms can be highly damaging to good environmental governance, paving the way for denialist projects.

Keywords: Democracy; participation; climate change; denialism; Brazil.

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During Jair Bolsonaro's administration (2019-2022), the Brazilian federal government developed a detrimental relationship with the environmental and climate policy. The government failed to uphold international agreements, ignored the effects of climate change, and encouraged an exploitative economic model within ecological protection areas, among other actions. Also, there was an increase in deforestation, fire outbreaks, and CO₂ emission in the country (ALENCAR et al., 2022; WERNECK et al., 2021). In short, Brazil went against the policies aimed at mitigating the climate crisis, generating considerable damage. Consequently, the country, once a leading figure in the climate agenda, became isolated from a range of international initiatives focused on preserving the planet's environment.

Therefore, examining the Brazilian context contributes to a more profound understanding of the complex relationship between democracy and sustainability. As emphasized in the literature, democratic contexts hold the potential to drive progress toward sustainability. This potential stems from these political systems' capacity to facilitate the organization of environmental movements, enable citizens to voice their preferences for environmental well-being, encourage compliance with international agreements, and foster the growth of green economy enterprises (BÄTTIG and BERNAUER and 2009; BAYER and URPELAINEN, 2016; HUGHES and URPELAINEN, 2015; QUEIROZ-STEIN, 2023). However, they can also result in the election of political leaders who deny climate change and pursue policies focused on unrestrained economic growth, as was the case with the Trump administration in the United States (2017-2021) and the Bolsonaro administration in Brazil (SEIFERT JR., QUEIROZ-STEIN and GUGLIANO, 2020). In a situation where global environmental issues are worsening, confining democracy to the mere process of selecting leaders through universal suffrage and political party competition exposes its limitations in effectively addressing sustainability challenges, especially within the context of climate change (FISCHER, 2017). For democracy to operate effectively, mechanisms for social control and citizen participation are essential.

In recent years, there has been a significant increase in the establishment of participatory institutions to strengthen environmental governance in various countries. This movement is driven by the recognition that such institutions play a

crucial role in improving public policy formulation processes, especially regarding mitigation and adaptation to climate change. Nevertheless, in Brazil, from 2019 to 2022, a contrary trend emerged, marked by the dismantling of participatory institutions and, consequently, a reduction in avenues for direct public participation in environmental and climate governance processes. We argue that this situation has diminished the government's capacity to incorporate critical information generated by civil society into the formulation and monitoring of public policies. Furthermore, it has hindered the capacity of non-governmental actors to propose, monitor, and oversee these policies.

Therefore, in this article, we analyze the role of participatory institutions in addressing climate change, exploring two strategies. First, we examine examples from both Europe and Brazil that demonstrate how there can be synergies between participatory institutions and climate change policies. Next, we address the concept of climate denialism, which allows us to understand the logic of the Bolsonaro government's actions in the environmental field. The analysis of the Bolsonaro government illustrates how this dynamic operates in reverse, that is, the dismantling of participation is strategic in advancing policies rooted in a climate denialist perspective.

As for the methodology, our study was structured around a literature review that centered on three key terms: environmental policies, climate change, and social participation. The primary databases of academic literature used in this review were SciELO Brasil and Google Scholar, which facilitated the initial selection of works that were subsequently analyzed and cataloged to develop the arguments presented in this article. We also investigated the shifts in political participation during Bolsonaro's administration, identifying actions by the executive branch that changed participatory institutions and analyzing the consequences of these changes on environmental governance. The main indicators used included the number of meetings of the studied councils and the budget execution of public funds managed by these councils. This information was primarily sourced from official websites of the Brazilian government and on Brazil's transparency website. In addition, we used reports from civil society organizations, government agencies, and scientific publications to gather information that helped identify the impact of these transformations on climate change mitigation efforts in Brazil.

To discuss the relationship between citizen participation and climate change, we structured the remainder of this article into four sections. First, we address cases of participatory institutions in Europe and Brazil, arguing that participation is crucial for improving climate change policies. In the second section, we explore the concept of climate denialism, highlighting its logic of denial, deregulation, and inaction concerning climate issues. In the third section, we analyze the environmental policy during Bolsonaro's government, emphasizing that climate denialism was not limited to mere rhetoric but rather served as a political force that promoted changes and undermined governance structures, a logic that proved to be anti-environmental. In the fourth section, we examine the dismantling of participatory bodies within the environmental policy framework and explore how the diminishing capacity of civil society to oversee government actions played a crucial role in the institutionalization of climate denialism. Finally, we present our conclusions.

Synergies between participative institutions and climate policies

Many studies have emphasized the importance of involving society in participatory processes related to climate change (BARTELS et al., 2012; GROTHMANN and MICHEL, 2021). These processes operate through participatory institutions, which encompass a range of institutional forums where people can discuss and, under certain conditions, deliberate on various issues that affect society, including those related to the environmental agenda (BARTON, KRELLENBERG and HARRIS, 2015; CABANNES, 2021b, 2021a; WILLIS, CURATO, and SMITH, 2022). Society's participation in discussions about climate change has played a fundamental role in reducing public misinformation. It helps prevent governments from adopting policies different from the public's preferences and contributes to the formulation of climate policies that are more transparent and widely accepted by public opinion. In several European nations, like Germany, France, and England, instances of citizen mobilization have emerged with the specific aim of seeking collective solutions to the problem of climate change. In summary:

(...), a deliberative approach can contribute to overcoming the problems that democracies face in dealing with the complex and long-term nature of the climate challenge; the need for careful use of scientific and technical evidence; the disproportionate influence of powerful political interests; and the distance between politicians and the citizens they represent. Deliberative democrats can offer no guarantee that deliberative democracy will "solve" the climate crisis, but the approach promises the creation of political spaces and systems within which the epistemological, moral and political challenges of the climate crisis are given fair treatment and considered judgments and collective actions can emerge (WILLIS, CURATO, and SMITH, 2022, p. 05).

In recent decades, numerous initiatives have emerged involving various sectors of society in discussions about climate change through various participatory institutions. Notably, European nations have been actively engaging in ongoing experiments with citizen juries and deliberative mini-publics to address this challenge. These practices have been implemented in Ireland (2016-2018), Germany (2015), and Belgium (2020), where multiple citizen assemblies were convened to discuss climate change (ROJON and PILET, 2021).

From 2019 to 2020, the United Kingdom and France also established citizen assemblies to engage in discussions and craft specific recommendations for addressing climate change. In the United Kingdom, this effort was driven by a joint initiative involving the government and parliament, with the broad support of various political parties, to promote these assemblies. In France, the initiative originated from civil society, after the popular mobilizations that took to the streets in various French cities in 2019.

As Rebecca Wells (2022) noted, the mobilizations in France and the United Kingdom had different impacts; however, in both cases, establishing citizen assemblies prompted a swift governmental response. In the United Kingdom, parliamentary committees were set up to address the assemblies' recommendations, and new legal measures were created to enhance the development of specific public policies. In France, the government put forward regulations for the climate and resilience law (Law 2021- N^o 1104, enacted on 08/22/2021) in response to societal discussions.

These assemblies largely represented an application of the deliberative democratic framework, which draws from the research conducted by James Fishkin (2009). In these experiences, a specific number of citizens are selected randomly,

typically through a lottery system, to discuss matters that demand a public resolution. This is precisely the model adopted in most proposals for citizen assemblies addressing the issue of climate change.

Apart from assemblies, participatory budgeting is another policy that encourages climate-related discussions. According to Cabannes (2021b), participatory budgeting mobilizes the creativity and imagination of citizens to propose local collective solutions, which is essential for improving the formulation of policies for mitigating global climate change. Many cities have considered the environment an issue to be discussed in participatory budgeting processes. In Molina de Segura, a province in the region of Murcia, Spain, combating global warming is one of the topics addressed in participatory budgeting since 2020. In Lisbon, the capital of Portugal, in that same year, one stage of the participatory budgeting process proposed a thematic meeting dedicated exclusively to climate change (CABANNES, 2021b). Expanding the scope of this analysis, Cabannes emphasizes that:

Cities have been successful in mobilizing additional resources for climate change-related PB [Participatory Budgets] projects, through different mechanisms: mobilizing international aid (i.e. Dalifort-Foirail, Senegal) and establishing national and international partnerships for mobilizing resources (i.e. Yaoundé 1, Cameroon); generating additional support through volunteerism, for instance in Agueda, Portugal, where PB staff agree to work overtime without pay to foster PB; and involving community labour for project implementation, primarily in rural areas such as Cuenca, Ecuador or Luhwindja, Kivu, DRC, where communities are heavily involved in PB projects such as tree planting to face erosion (CABANNES, 2021a, p. 370).

Furthermore, in some European regions, the concept of 'green participatory budgeting' is emerging as a specialized form of participatory budgeting centered on eco-development, environmental concerns, sustainability, and climate change. This is considered one of the most significant innovations in revitalizing participatory institutions (CABANNES, 2021b).

Brazil has a rich history of experiences involving participatory institutions in environmental governance. Among these organizations, it is important to highlight policy advisory councils and their role in promoting interaction among

various stakeholders in deliberative forums. These councils can generate innovative ideas and creative solutions to address public issues (ABERS and KECK, 2008). In many cases, local, regional, and federal environmental councils have served as arenas for negotiation, bringing together various, sometimes opposing, interests to discuss environmental matters. When conducted in compliance with established legal frameworks, public hearings concerning ecological issues have also served as a platform for society to voice its demands. In this context, despite the heterogeneous nature of these communication channels between the state and society in Brazil, they have served as a means to democratize environmental policies (GOUVEIA, SELVA and PAZ, 2019; PRADO et al., 2020). Federal-level public policy advisory councils are crucial in developing strategies to combat climate change. These councils serve as participatory forums where different sectors of society collaborate in formulating, monitoring, and evaluating environmental policies. With an essential contribution from civil society, these councils have been leading the way in implementing the country's sustainability and environmental protection policies, particularly since the 1990s.

In 1981, the federal government established the National Environment Council (CONAMA) as an advisory and deliberative body, governed by the National Environmental Policy and Decree N^o 99,274 of 1990. Its board includes representatives of five segments: the business sector, civil society environmental organizations, federal-level state agencies, subnational states, and municipalities. One of its roles is to establish standards and criteria for aspects such as the licensing of activities that are either currently or potentially polluting to be granted by all levels of government in the federation. Similarly, CONAMA establishes regulations, criteria, and standards concerning the oversight and preservation of environmental quality to promote the sustainable use of natural resources. Additionally, the council requires studies on the alternatives and potential environmental impacts of public and private projects. Other forums have been vital in consolidating a governance structure open to civil society participation and control within the Ministry of Environment. Among these, the Genetic Heritage Management Council (CGEN), created in 2001, and the National Biodiversity Commission (CONABIO), established in 2003, stand out. They played a crucial role in setting an agenda for biodiversity protection and sustainable uses.

It is worth noting that the ratification of the Kyoto Protocol in 1997 strengthened Brazil's climate policy's institutionalization. Following this ratification, Law N° 9,478/1997 stipulated that 10% of government revenue from oil exploration would go to the Ministry of Environment to mitigate its adverse impacts. Since then, the management structure of climate policies has included collaborative boards for governance with the participation of the national scientific community. The federal government established the Interministerial Commission on Global Climate Change in 1999 and also created the Brazilian Forum on Climate Change, a collaborative board to provide scientific advice to the Presidency of the Republic in 2000.

Building on this extensive framework for political participation, Brazil distinguished itself as a pioneer in Latin America by enacting the National Policy on Climate Change (Law N° 12,187/2009) as part of its commitments at the 2009 United Nations Climate Change Conference (FREITAS and GUSSI, 2021). This policy committed to reducing greenhouse gas emissions by approximately 36.1% to 38.9% compared to 2020 projected emissions, with a particular focus on addressing deforestation in the Amazon region (TEIXEIRA, MOLLETA and LUEDEMANN, 2016, p. 290). Subsequently, Brazil reiterated its commitment to addressing climate change by signing the Paris Agreement, pledging to reach net-zero carbon emissions by 2050.

However, beginning in the mid-2020s, these objectives were gradually abandoned, with this trend intensifying from 2019 onward. Throughout this period, participatory institutions significantly weakened, reducing their ability to influence policies and exercise social oversight through channels established and institutionalized by the federal government. Brazil's case suggests that while participatory mechanisms can bolster broader efforts to tackle the climate crisis, their absence reveals shortcomings and weaknesses in the government's approach to this matter. Indeed, this occurred under Bolsonaro's administration, when the complex participatory system designed to enable civil society's participation in environmental issues was dismantled to expedite the adoption of policies conflicting with ecological conservation and climate change mitigation efforts, as we will further explore in the next sections. We begin our analysis by discussing the concept

of climate denialism, which helps us understand the logic behind the environmental policies adopted during Bolsonaro's government. Next, we investigate how this logic became institutionalized during that government, resulting in the dismantling of state initiatives designed to combat climate change.

Climate denialism

Climate denialism is a conservative and skeptical political view that rejects the evidence and scientific methodologies establishing the human role in global warming. It also casts doubt on the severity of the consequences of this phenomenon and the need to take action to address it (MANN and TOLES, 2016). Denialists employ a distinct rhetorical strategy, similar to neoconservative movements, where they create uncertainty and doubt to challenge the principles and scientific evidence that contradict their values and beliefs (DUNLAP and McCRIGHT, 2011). In doing so, they directly oppose the relatively well-established scientific consensus in their quest to secure political, economic, and social support. To do this, they present their arguments with rhetoric similar to scientific discourse, even though they may lack robust evidence, all in an effort to gain credibility:

Environmental scepticism is an elite-driven reaction to global environmentalism, organised by core actors within the conservative movement. Promoting scepticism is a key tactic of the anti-environmental counter-movement coordinated by CTTs [Conservative Think Tanks], designed specifically to undermine the environmental movement's efforts to legitimise its claims via science. Thus, the notion that environmental sceptics are unbiased analysts exposing the myths and scare tactics employed by those they label as practitioners of 'junk science' lacks credibility. Similarly, the self-portrayal of sceptics as marginalised 'Davids' battling the powerful 'Goliath' of environmentalists and environmental scientists is a charade, as sceptics are supported by politically powerful CTTs funded by wealthy foundations and corporations (JACQUES et al., 2008, p. 364).

Authors who have extensively examined the evolution of the global warming debate, including Anthony Giddens (2010), David Elliot (2015), and Sergio Abranches (2011), have shown the scientific consensus that the Earth's average temperature is increasing, primarily due to higher greenhouse gas emissions. This phenomenon is closely linked to anthropogenic causes, such as the combustion of

fossil fuels and deforestation. Some surveys even assert that as many as 97% of scientists agree with this argument (COOK et al., 2013). Some of the world's most prominent and long-standing scientific organizations, including the United Kingdom's Royal Society and the US National Academy of Sciences, also endorse this view (ELLIOT, 2015, p. 03) Despite the wealth of scientific evidence backing this consensus, what motivates certain individuals to persist in denying the reality of climate change? They are primarily driven by political interests associated with denialism. As Michel Mann and Tom Toles (2016) argue:

The answer, of course, is that climate change denial isn't really about the science; it is instead about the politics. It is about powerful vested interests that find the implications of the science (that there is a need to stop burning fossil fuels) inconvenient. It is about a massive disinformation campaign to justify an agenda of inaction. Denial that a problem exists in the face of overwhelming scientific consensus that it does leads to often amusing verbal contortionism as climate-denying politicians and talking heads navigate their way through the "six stages of denial (MANN and TOLES, 2016, p. 53).

According to Mann and Toles (2016, pp. 53-68), denialism and its rhetorical contortions progress through various stages of discourse: 01. denying the phenomenon ('It's Not Happening'); 02. acknowledging it is happening but attributing it to natural causes ('OK, It's Happening . . . but It's Natural'); 03. insisting the issue will resolve itself and does not require targeted actions ('The Problem Is Self-Correcting Anyway'); 04. arguing that global warming is something positive ('And It Will Be Good for Us!'); 05. claiming it is too late or the costs of action are too high ('It's Too Late or Too Expensive to Act...'); and 06. believing that there is no major cause for concern because technical solutions will be found ('We'll Find Some Simple Technofix Anyway'). Even when climate denialists acknowledge the existence of the phenomenon, their logic persists in arguing that no specific actions or policies are necessary to tackle climate change. This stance is rooted in the belief that the issue will self-correct, the private sector can implement technical solutions, policy costs would be unreasonably high, or the consequences might even be beneficial. In other words, denialism calls for inaction.

In practice, one can identify the political forces propelling these discourses. In a study conducted in the United States, Jacques et al. (2008) discovered a clear

link between think tanks and denialist publications. Their research sample revealed that more than 92% of denialist books were linked to conservative think tanks. In the context of multiparty democracies in Europe, including countries like Germany, France, Spain, and the Netherlands, far-right political parties often adopt platforms that vehemently oppose energy transition and decarbonization policies in a broad sense. Their arguments explicitly reject climate science (HESS and RENNER, 2019).

Dunlap and McCright (2011) have made significant progress by identifying the various actors influencing denialist discourses. These actors operate in different fronts, including those who provide financial support, such as industries connected to the fossil fuel sector and conservative foundations. Additionally, some organizations play a role in shaping denialist ideas, particularly conservative think tanks. Lastly, individuals on the front lines – such as social media activists, bloggers, and conservative politicians – disseminate these discourses and develop strategies to increase their influence in the political arena. According to Dunlap and McCright (2011), these actors and organizations together form a well-structured political movement, a denialist machine.

The denialist speech assumes several nuances, as Mann and Toles (2016) identified. Nevertheless, as Dunlap and McCright (2011) emphasized, these actors share a common trait: They are opposed to regulations and government policies essential for addressing climate change. The authors state: “A staunch commitment to free markets and disdain of governmental regulations reflect the conservative political ideology that is almost universally shared by the climate change denial community” (DUNLAP and McCRIGHT, 2011, p. 120). Apart from not acting in response to the climate emergency, there is also a concerted effort to roll back institutional progress concerning government initiatives to address climate change. This trend became particularly noticeable during Jair Bolsonaro's government in Brazil.

As we will demonstrate in the next sections, a common logic pervades various actions of Jair Bolsonaro's neoconservative government in the environmental field. This logic involves restricting the state's capacity to regulate and propose solutions to climate change by dismantling existing institutional structures. It is manifested in various ways, encompassing budget cuts and

downsizing of agencies responsible for this policy sector, the relaxation of environmental inspection and licensing regulations, and the elimination of participatory forums where scientists and civil society organizations previously voiced their environmental perspectives and monitored government initiatives.

The institutionalization of denialism in the Bolsonaro government

Jair Bolsonaro's government combined two interconnected characteristics that hindered efforts to combat climate change: denialism and the dismantling of participatory institutions. In addition to undermining the democratization of environmental policies, these characteristics have hampered the implementation of policies, resulting in ecological consequences such as increased forest fires and deforestation. This administration moved in the opposite direction from the experiences mentioned in Section 02. Contrary to the idea that promoting participatory institutions enhances climate change policies, in Brazil, dismantling such institutions has proven to be an effective strategy for advancing a project designed to undermine environmental governance (BEZERRA et al., 2022; SEIFERT JR., QUEIROZ-STEIN, and GUGLIANO, 2023).

Following a similar discourse to former United States President Donald Trump (2017-2021), Bolsonaro downplayed the impacts of climate change and the rise in greenhouse gas emissions. As pointed out by Viola and Franchini (2022), President Bolsonaro's anti-climate stance was clearly manifested in various speeches, both nationally and internationally. On these occasions, Bolsonaro expressed the view that global warming was a commercial issue, a threat to Brazil's economic development. The Paris Agreement was seen as part of a worldwide conspiracy to undermine the country's sovereignty, especially during Ernesto Araújo's tenure as the Minister of Foreign Affairs from 2019 to 2021. Araújo openly referred to global warming as a 'Marxist invention' (RAMOS, 2021).

During his speech at the 74th United Nations General Assembly in September 2019, President Bolsonaro presented his perspective to the world for the first time. He argued that the Amazon fires resulted from dry weather conditions and the actions of indigenous communities, not criminal activities (BRASIL, 2019). He criticized reports from the international press and warned that they amounted

to an attack on Brazilian sovereignty, stating they would be confronted with patriotism. Using patriotic justifications, the presidential speech underscored a recurring theme in this administration: denying the harmful impacts of climate change and, as a result, failing to support the development of environmental policies.

The president's anti-scientific discourse went beyond mere words. It was translated into federal government policies. The climate change matter was effectively removed from the Ministry of Environment's framework, closing the Secretariat of Climate Change and eliminating specific budget allocations as early as 2019 (VIOLA and FRANCHINI, 2022). The agency within the Ministry of Foreign Affairs focused on climate change was also disbanded (FEARNSIDE, 2019). Similarly, Brazil dramatically reduced its investments in science and technology related to climate change. In 2019, the government allocated only R\$1 million to this sector, followed by R\$659,000 in 2020, and by October 2021, only R\$426,000 was spent (PRAZERES, 2021). These figures reinforce Miguel's (2022) assertion that while climate denialism existed before President Bolsonaro's administration, his government intensified its implementation.

As Minister of Environment from 2019 to 2021, Ricardo Salles played a central role in hindering oversight agencies and the enforcement of environmental regulations (SEIFERT JR., QUEIROZ-STEIN, and GUGLIANO, 2023). Efforts to dismantle agreements between the federal government and NGOs¹, cut government resources for projects developed by local communities, and curtail the autonomy of environmental agencies marked his time in office (WERNECK et al., 2021). In 2021, following the removal of Ricardo Salles, Joaquim Leite, also linked to Brazilian agribusiness, took over as Minister of Environment and continued the denialist policies. Institutionally, both administrations witnessed a notable decline in environmental governance, particularly in participatory bodies and oversight and monitoring activities. Both the Brazilian Environment and Renewable Natural Resources Institute (IBAMA) and the Chico Mendes Institute for Biodiversity Conservation (ICMBio) suffered setbacks resulting from political interference in

¹Available at <<https://oeco.org.br/noticias/ricardo-salles-suspende-todos-os-contratos-e-parcerias-com-ongs/>>. Accessed on September, 28, 2022.

administrative processes, such as environmental licensing and inspections, along with a reduction in human and financial resources (GUGLIANO et al., 2022; SEIFERT JR., QUEIROZ-STEIN, and GUGLIANO, 2023).

The weakening of key Brazilian environmental agencies coincided with a substantial rise in environmental disasters and crimes, including the surge in Amazon fires starting in 2019 (WERNECK et al., 2021). Similarly, there has been an increase in the number of land conflicts related to the invasion of indigenous territories, as well as a rise in the killings of human rights and environmental activists and leaders (INA and INESC, 2022). According to the organization Front Line Defenders, in 2021, Brazil ranked third in the number of murders of human rights defenders, with a total of 27 cases in the country. Notably, 59% of these victims were actively defending indigenous territories, traditional populations, and environmental rights (FRONT LINE DEFENDERS, 2022).

All these aspects are directly related to the climate debate, as the conservation and restoration of forests and other ecosystems play a crucial role in addressing and mitigating global warming (ABRAMOWAY, 2019). Nevertheless, from a denialist standpoint, the climate issue is no longer part of the public agenda. In summary, the institutionalization of denialism has led to the deinstitutionalization of the structures and tools that could be used to implement the National Policy on Climate Change and achieve internationally established goals (SEIFERT JR., 2021).

While all of this is already extremely disastrous during an unprecedented global crisis, the actions of the Bolsonaro government were even more severe. Rather than fostering a connection between environmental matters and the daily concerns of the population to bridge the gap and build a consensus on the importance of the climate crisis, the government intentionally distanced society from environmental organizations in government discussions, as we will outline next.

The dismantling of participatory institutions in the environmental sector

One of the denialist actions of Jair Bolsonaro's government was to dismantle participatory policies and institutions that previous administrations had

established. Many mechanisms for civil society's active participation in environmental policy formulation, monitoring, and evaluation were dismantled. Decree N° 9759/2019 dismantled the nation's existing social participation framework, eradicating several structures and mechanisms that had, in various ways, offered institutional avenues for citizen engagement and social and institutional involvement in various forums and stages of public policies (BEZERRA et al., 2022; SEIFERT JR., QUEIROZ-STEIN, and GUGLIANO, 2023).

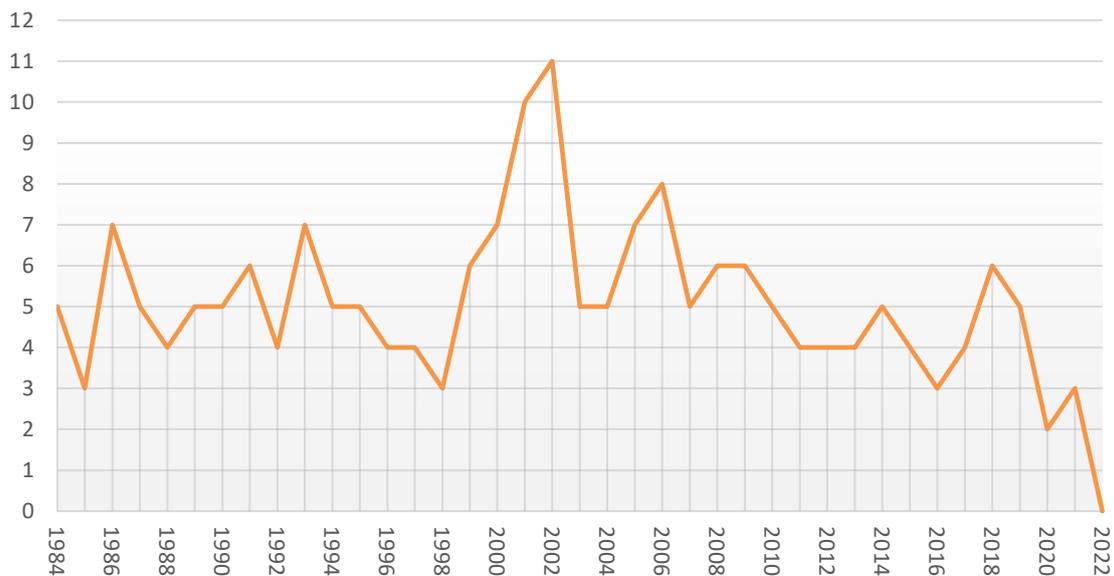
This decree significantly changed the environmental policy landscape in the country. As previously mentioned, the environmental sector has effectively established participatory institutions such as councils, conferences, sustainable policy commissions, and numerous public hearings since the 1990s. The consequences of Decree N° 9759/2019 were profound. These institutions played a pivotal role not only in facilitating communication between the federal government and the needs identified by local communities and civil society organizations but also in fortifying the system for monitoring environmental violations.

Certain participatory institutions persisted during Bolsonaro's government, particularly those protected by legal provisions and immune to revocation by Executive Branch decree (BEZERRA et al., 2022). However, in these cases, the government weakened civil society's ability to participate in deliberations and monitor government actions. CONAMA is an illustrative example of this process. Apart from making significant changes to the composition of this body, which included increasing the number of government representatives while reducing civil society representation, the government also adopted a strategy to significantly reduce CONAMA's deliberative authority (GUGLIANO et al., 2022; SEIFERT JR., QUEIROZ-STEIN, and GUGLIANO, 2023).

The decrease in the frequency of CONAMA meetings clearly illustrates this hollowing out (Figure 01). This council held four annual ordinary meetings in the past, but from 2019 to 2022, it dropped to just two. Although there were some extraordinary meetings during this period, they could not make up for the missing ordinary ones. 2022 was the worst year since there were no documented ordinary or extraordinary meetings in the government's official websites until October. As a result, between 2019 and 2022, CONAMA held an average of 2.5 meetings, well below the historical average of 5.3 meetings per year from 1984 to

2018. Moreover, the few CONAMA meetings under Jair Bolsonaro's government tackled issues that opposed the promotion of environmental quality and the protection of species and ecosystems, displaying an anti-environmental approach (DEUTSCH, 2021; SEIFERT JR., QUEIROZ-STEIN, and GUGLIANO, 2023).

Figure 01. Number of ordinary and extraordinary CONAMA meetings (1984-2022)



Source: Elaborated by the authors based on the CONAMA (2022).

Participatory bodies directly tied to climate change, including the governance system known as REDD+², were also weakened. REDD+ is crucial for Brazil to achieve its goals outlined in the Intended Nationally Determined Contribution submitted to the Paris Agreement. The composition of the National Commission for REDD+³ was changed, resulting in the reduction of seats allocated for civil society representatives (GUGLIANO et al., 2022; SEIFERT JR., QUEIROZ-STEIN, and GUGLIANO, 2023). Furthermore, the pace of activities within the intricate governance framework, established in 2014, slowed down significantly in 2019 and 2020.

²Acronym for 'reducing emissions from deforestation and forest degradation'.

³The full name of this commission in the federal administrative structure is the National Commission for the Reduction of Greenhouse Gas Emissions from Deforestation and Forest Degradation, Conservation of Forest Carbon Stocks, Sustainable Forest Management, and Enhancement of Forest Carbon Stock.

Figure 02 displays the sum of all activities conducted by the National REDD+ Commission, technical working groups, thematic advisory committees, and the advisory committee for the REDD+ results-based payments project. The data shows that all this work stopped during the first year of Jair Bolsonaro's government. In 2020, when activities resumed, the National Commission held just three ordinary meetings. In 2021, the technical working groups and the advisory committee meetings resumed, but with reduced participation from civil society. Arguably, this restart could be a response to growing international pressure stemming from negative media attention on the increase in forest fires and deforestation in the Amazon region. However, the pace of activities sharply declined once again in 2022 (Figure 02). Thus, substantial disruptions and a decline in social participation reshaped the governance system, which became considerably more technocratic and unstable.

Figure 02. Index of activities within the REDD+ Governance Framework in Brazil (2014-2022)



Source: Elaborated by the authors based on the REDD+ BRASIL (2022).

Note: The index reflects the sum of records of meetings, workshops, and seminars from the National Commission for REDD+; REDD+ Measurement, Reporting, and Verification Technical Working Group; Safeguards Technical Working Group; REDD+ Technical Working Group; Thematic Advisory Committee (TAC) on Non-Reimbursable Resources Collection and Distribution; TAC on Federative Pact; TAC on Safeguards; and the REDD+ Results Project Advisory Committee.

The denialism of Bolsonaro's government was also expressed in the dismantling of the Amazon Fund Steering Committee, which comprised

representatives from civil society, the federal government, and state governments. This committee oversaw the largest international cooperation project for preserving the Amazon. As stated on the official website at the time of data collection: "Decree N^o 9,759, dated April 11, 2019, led to the extinction of various federal public administration committees, including the COFA [Steering Committee of the Amazon Fund] and the CTFA [Technical Committee of the Amazon Fund]. To date, the new governance structure for the Amazon Fund has not been determined" (FUNDO AMAZÔNIA, 2022)⁴. As a result, there was a loss of funds that could have been directed to socio-environmental projects in the Amazon region. Over the past few years, the Amazon Fund has received a total of R\$ 3.1 billion. However, since the dissolution of the Steering Committee, foreign contributions have been halted. At the same time, the fund was put on hold, leaving around R\$ 2.9 billion unused (O GLOBO, 2020).

Furthermore, civil society was excluded from the deliberative council of the National Environmental Fund (FNMA), which is focused on providing financial support for environmental projects in the country (SEIFERT JR., QUEIROZ-STEIN, and GUGLIANO, 2023). Previously, the council consisted of eight representatives from the federal government and ten from non-governmental organizations, including the Brazilian Association of Environmental Entities (Abema), the National Association of Municipalities and the Environment (Anamma), the Brazilian Forum of NGOs and Social Movements for the Environment and Development (FBOMS), as well as the Brazilian Society for the Advancement of Science (SBPC). Starting in 2020, all these organizations were excluded, and management was exclusively handled by six government representatives from the Ministry of Environment, the Chief of Staff of the Presidency of the Republic, the Ministry of Economy, IBAMA, and ICMBio.

Like the other mentioned councils, the implementation of environmental policy in this case also experienced significant setbacks. The first sign that the National Environmental Fund was inoperative was the lack of documented meetings

⁴Authors' translation.

of the deliberative council⁵ during data collection on the fund's official website. Additionally, the calls for proposals and terms of reference that could induce the demand for environmental projects were interrupted. The fund's official website indicated that the last call for proposals had been issued in 2018⁶. Moreover, website information indicates that, since 2018, only one project received support, in 2020⁷. To further complicate matters, the federal government's transparency website shows that a budget had been earmarked for this purpose (Table 01). Still, the money sat unused in the fund, with no significant expenses detected.

Table 01. National Environmental Fund Budget (2019 - 2022)

Year	Expected expenditures	Executed expenditures	Executed\expected
2019	R\$ 51,790,000.00	R\$ 48,640.00	0,09%
2020	R\$ 33,690,000.00	R\$ -	0,00%
2021	R\$ 28,620,000.00	R\$ 21,710.00	0,08%
2022	R\$ 32,820,000.00	R\$ 498.00	0,00%

Source: Elaborated by the authors based on TRANSPARENCY WEBSITE (2022).

Another participatory institution through which civil society could directly influence policies against global warming was the Management Committee of the National Climate Change Fund (Climate Fund). The composition of this committee, however, changed significantly during Jair Bolsonaro's administration. Decree N^o 10,143 dated November 28, 2019, resulted in the exclusion of representatives from diverse sectors, including members of the scientific community, non-governmental organizations appointed by the Brazilian Forum on Climate Change, rural workers, family farmers, traditional communities, and urban workers. Also, it no longer included representatives from states, municipalities, and the Federal District. Consequently, the management committee ended up including only representatives from the federal government and business sectors, with reserved seats for national

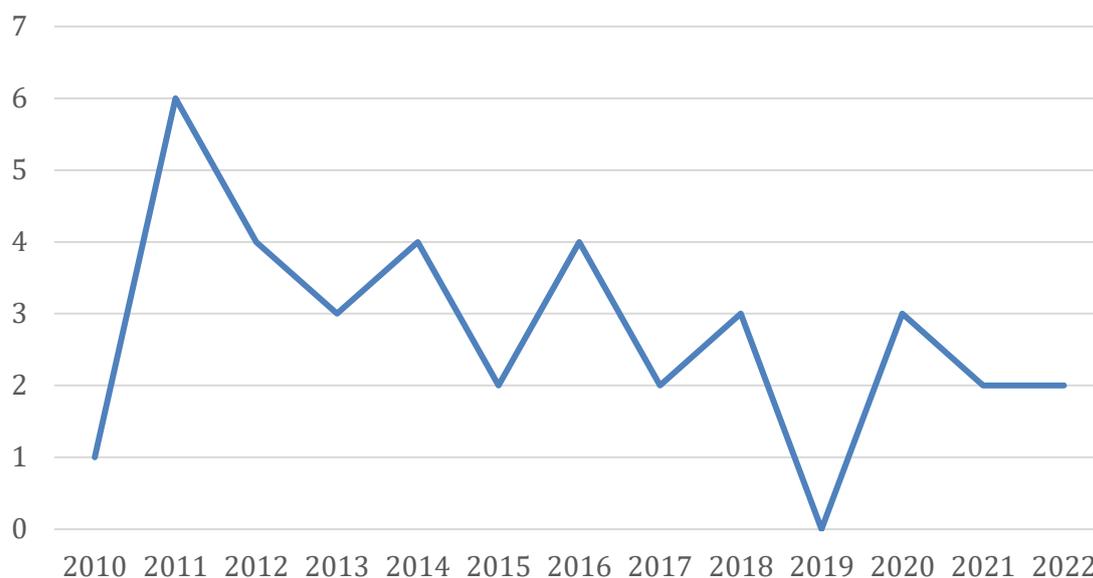
⁵Available at <<https://www.gov.br/mma/pt-br/aceso-a-informacao/apoio-a-projetos/fundo-nacional-do-meio-ambiente>>. Accessed on October, 14, 2022.

⁶Available at <<https://www.gov.br/mma/pt-br/aceso-a-informacao/apoio-a-projetos/fundo-nacional-do-meio-ambiente/editais-e-termos-de-referencia-1>>. Accessed on October, 14, 2022.

⁷Available at <https://www.gov.br/mma/pt-br/aceso-a-informacao/apoio-a-projetos/fundo-nacional-do-meio-ambiente/arquivos-pdf/copy5_of_ProjetosFNMA1990A2020site2.pdf>. Accessed on October, 14, 2022.

confederations representing the manufacturing sector, commerce, services, agriculture, and transportation.

Figure 03. Number of meetings of the Climate Fund Management Committee per year (2010-2022)



Source: Elaborated by the authors based on COMITÊ GESTOR (2022).

Similarly to what happened in other councils, the Climate Fund Management Committee saw fewer meetings between 2019 and 2022, with 2019 standing out for having no meetings (Figure 03). Managing the fund became challenging, particularly in 2019, when, for the first time, an Annual Resources Allocation Plan was not presented. Despite a budget allocation of over R\$ 357 million, no actual expenses were executed in 2019 (Table 02). In subsequent years, there have been no substantial changes to this picture. Only two new projects⁸ received support and were approved in calls made before 2019⁹. The only call made during the Bolsonaro administration was in 2022, with a proposal deadline set for

⁸Available at <<https://www.gov.br/mma/pt-br/aceso-a-informacao/apoio-a-projetos/fundo-nacional-sobre-mudanca-do-clima/projetos-apoiados>>. Accessed on October, 17, 2022.

⁹Available at <<https://www.gov.br/mma/pt-br/aceso-a-informacao/apoio-a-projetos/fundo-nacional-sobre-mudanca-do-clima/chamadas-editais-1>>. Accessed on October, 17, 2022.

August of that year. However, it was only published on the website in May 2023¹⁰, alongside a new call for proposals.

Table 02. Budgetary expenses of the National Climate Change Fund (2019-2022)

Year	Expected expenditures	Executed expenditures	Executed\expected
2019	R\$ 357,010,000.00	R\$ -	0,00%
2020	R\$ 239,350,000.00	R\$ 232,850,000.00	97,28%
2021	R\$ 323,500,000.00	R\$ 322,970,000.00	99,84%
2022	R\$ 444,650,000.00	R\$ 444,110,000.00	99,88%

Source: Elaborated by the authors based on TRANSPARENCY WEBSITE (2022).

As we have argued, the mentioned changes in environmental policies should not be analyzed as random events, as they play a fundamental role in the efforts to institutionalize denialism. The denialist logic that the state should not take measures to tackle global warming explains why Bolsonaro's government acted swiftly, making significant changes in the initial months of 2019 that dramatically reshaped Brazilian environmental policies. The dismantling took place rapidly, particularly during the first year of President Bolsonaro's term. Through various decrees, he curtailed the influence of social movements and civil society organizations in shaping environmental policies (SEIFERT JR., QUEIROZ-STEIN, and GUGLIANO, 2023). The disruption of councils and other advisory bodies involving civil society participation created an atmosphere of distrust, reduced the influx of international funds to the country, and directly affected the execution of pre-planned expenses. Therefore, financial resources were available to be allocated, but the political decision to dismantle established governance structures resulted in the suspension of projects.

The denialist discourse, the dismantling of environmental councils, and the weakening of enforcement and regulatory agencies contributed to a surge in criminal activities in forested areas, such as illegal logging, mining, and the encroachment on indigenous lands (LIMA and COSTA, 2022; OLIVEIRA, SELLARE, and BÖRNER, 2023; SIQUEIRA-GAY and SÁNCHEZ, 2021). In this context of institutional erosion, deforestation rose by 56% from 2019 to 2021 compared to the

¹⁰Available at <<https://www.gov.br/mma/pt-br/aceso-a-informacao/apoio-a-projetos/fundacional-sobre-mudanca-do-clima/chamadas-editais-1/edital-2022>>. Accessed on November, 09, 2023.

2016-2018 period (ALENCAR et al., 2022). Deforestation was concentrated mainly on public lands of the federal government, demonstrating how the state itself enables this phenomenon by not investing in territory inspection and monitoring (ABRAMOWAY, 2019).

At the same time, the number of fires in the Amazon rainforest increased during the Bolsonaro government. This practice is typically used to clear forested areas and expedite the establishment of agricultural and livestock ventures in the region, leading to significant costs linked to CO₂ emissions into the atmosphere and respiratory health problems (MENDONÇA et al., 2004). In Bolsonaro's first year in office, the National Institute for Space Research recorded 197.6 thousand fire outbreaks in the region, a nearly 50% rise from the previous year, destroying approximately 20 thousand hectares of vegetation. In the Legal Amazon, there was a 39.47% increase in fire outbreaks between 2018 and 2019, with the figures rising from 90,408 to 126,089. In 2020, the number of fire outbreaks increased by 19.58%, reaching 150,783. In the following year, 2021, there was a decrease to 102,210, a number that still surpassed the figures from 2018¹¹ (INPE, 2022). It is important to note that some studies have found statistical evidence that directly links Bolsonaro's political discourse and the rise in the number of fires and the increase in deforestation (CAETANO, 2021; OLIVEIRA, SELLARE, and BÖRNER, 2023).

The outcomes of this process are dire. As noted by other authors, the environmental assaults in the Amazon region are impairing the forest's ability to capture carbon from the atmosphere, which, in turn, contributes to global temperature increases and a reduction in rainfall (GATTI et al., 2021; NOBRE et al., 2016). Deforestation and fires have both played a role in categorizing municipalities in the Amazon region as some of the country's major greenhouse gas emitters¹². Therefore, denialism is not just a discursive phenomenon. In Brazil, between 2019 and 2022, it became a government practice that profoundly changed environmental

¹¹This compares the total number of fire outbreaks detected by the AQUA_M_T satellite in the Legal Amazon.

¹²Ranking and data are available at <<https://plataforma.seeg.eco.br/map?cities=true>>. Accessed on September, 28, 2022.

governance structures, significantly undermining the country's ability to combat global warming.

Conclusion

The environmental sector provides many opportunities for government and civil society interaction. Internationally, there are important examples of state-society collaboration. In countries such as France, Spain, the United Kingdom, and Portugal, participatory institutions play a crucial role in enhancing climate change policies. These forums and participatory platforms have also become essential for civil society to actively oversee government actions. In Brazil, these mechanisms thrived after democratization and made essential contributions to consolidating policies to fight global warming but faced significant challenges during Jair Bolsonaro's administration. This is because, as we have argued, denialist governments aim to dismantle direct channels of civil society influence on policies. They do this to prevent environmental actors from overseeing and monitoring government actions.

The dismantling of institutions also impacts policy implementation by disrupting established structures with decision-making mandates over resource allocation. Thus, we must agree with the argument that Bolsonaro's environmental management was not just a case of misgovernance but rather a case of malgovernance (LIMA and COSTA, 2021). In other words, it was not just about making poor decisions due to a lack of political and administrative competence but intentionally steering environmental policy in, paradoxically, an anti-environmental direction (DEUTSCH, 2021).

This intention was grounded in the belief that the nation's economic growth relies on the expansion of agriculture, livestock, and mining activities in regions that are still environmentally protected, particularly in the Amazon. This approach harkened back to older ideas prominent during the military dictatorship era. In Bolsonaro's administration, this view, coupled with an ultraliberal stance, considered any state regulation, especially in the environmental sector, an obstacle to economic activities. However, instead of driving economic growth, the absence of a strong climate policy, along with the increasing illegal deforestation and fires in

the Amazon, has reduced the country's ability to attract international investments for a green economy.

While Brazil was known as an environmental leader in the past, holding significant soft power (ABRANCHES, 2020), since 2019, Brazil's anti-environmental stance has been increasingly viewed as a global problem and threat in a troubled world. Consequently, Bolsonaro's government strained Brazil's ties with several nations and international organizations, as indicated by the suspension of the Amazon Fund. Public actors in the future will need to prioritize the environmental agenda, historically marginalized in public policy discussions. Contrary to traditional economic perspectives, environmental issues go beyond resource scarcity for producing goods and services. The global environmental crisis forces us to see nature as essential to economy, politics, and society. Promoting balanced ecosystems that embrace all social and biological diversity is vital for enhancing society's ability to withstand and respond to climate change. Achieving this goal requires the active participation of indigenous peoples, traditional communities, family farmers, and all organizations committed to environmental protection and knowledge generation. Therefore, it is crucial to strengthen democracy and foster political participation to prevent, reduce, and mitigate the impacts of climate change.

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