

The active dismantling of environmental policy in Brazil: paralysis and setbacks of the deforestation inspection and control

*O desmantelamento ativo da política ambiental no Brasil:
paralisa e retrocessos da fiscalização e controle
do desmatamento*

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doi:10.18472/SustDeb.v14n1.2023.44277

Received: 22/07/2022
Accepted: 21/03/2023

ARTICLE- DOSSIER

ABSTRACT

The paper aims to analyse the street-level bureaucrats' (SLBs) perception of President Bolsonaro's administration's effects on Brazilian environmental policy, emphasising deforestation prevention and control in the Legal Amazon¹. Besides the policy dismantling concepts, a theoretical model integrating three complementary analytical dimensions of SLBs' action – institutional, individual, and relational – was employed in a case-oriented investigation of environmental bureaucrats – Ibama Inspectors and ICMBio Agents. The inquiry used Systematic Content Analysis on interviews with these agents involved in deforestation inspection and control activities. The empirical results confirm the hypotheses that an active dismantling process has been ongoing since the beginning of Bolsonaro's administration; however, the perceptions of Ibama inspectors seem more intense, especially regarding the institutional dimension. The research illustrates the adverse effects of this process on the agencies and bureaucratic capacities, generating paralysis and setbacks in deforestation inspection and control policies and posing serious risks to the environmental protection in the country. This article contributes to the advancement of knowledge about the strategies that a far-right populist government deliberately adopted to reduce the role of the State, weaken professional bureaucracy, dismantle policies and favour particular interests of groups.

Keywords: Policy dismantling. Environmental policy. Street-level bureaucrats. Deforestation inspection and control. Far-right populism. Brazil.

RESUMO

O objetivo do artigo é analisar a percepção dos burocratas de nível de rua (BNRs) sobre os efeitos da administração do presidente Bolsonaro na política ambiental brasileira, com ênfase na prevenção e controle do desmatamento na Amazônia Legal. Além dos conceitos de desmantelamento da política, foi empregado um modelo teórico que integra três dimensões analíticas complementares da atuação dos BNRs – institucional, individual e relacional –, em uma investigação “case-oriented” sobre burocratas ambientais – fiscais do Ibama e agentes do ICMBio. A pesquisa utilizou a Análise Sistemática de Conteúdo de entrevistas com esses agentes envolvidos em atividades de fiscalização e controle do desmatamento. Os resultados empíricos confirmam as hipóteses de que um processo de desmantelamento ativo está em andamento desde o início da administração de Bolsonaro; entretanto, as percepções dos fiscais do Ibama parecem mais intensas, especialmente no que diz respeito à dimensão institucional. A investigação ilustra os efeitos adversos desse processo sobre as agências e as capacidades burocráticas, gerando paralisias e retrocessos nas políticas de fiscalização e controle do desmatamento e trazendo sérios riscos à proteção do meio ambiente no país. Este artigo contribui para o avanço do conhecimento sobre as estratégias que um governo populista de extrema direita adotou deliberadamente para reduzir o papel do Estado, enfraquecer a burocracia profissional, dismantlar políticas e favorecer interesses particulares de grupos.

Palavras-chave: Desmonte de políticas. Política ambiental. Burocratas de nível de rua. Fiscalização e controle do desmatamento. Populismo de extrema direita. Brasil.

1 INTRODUCTION

The paper’s primary goal is to analyse the street-level bureaucrats’ (SLBs) perception of the effects of President Bolsonaro’s administration on the environmental policy implementation in Brazil, with an emphasis on deforestation prevention and control in the Legal Amazon(1). Did the notorious public position of the former government affect this policy implementation? Did the dismantling process impact deforestation inspection and control activities? How have the key agencies, the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama) and the Chico Mendes Institute for Biodiversity Conservation (ICMBio), and their street-level bureaucrats been affected by the active policy dismantling?

The analysis of frontline environmental agents’ perception of the dramatic institutional changes that have occurred in Brazil represents a necessary contribution to advancing knowledge about the strategies that a far-right populist government, such as Bolsonaro’s, deliberately adopted to favour its ideological agenda and the interests of private groups that formed its political support base. The research goal is likewise justified by the need to understand how these strategies were conducted in countries affected by democratic backsliding that was also in progress in Brazil.

To address these research questions, the inquiry applies the analytical approach to the implementing agent of the Brazilian environmental policy in the Amazon region, emphasising deforestation prevention and control plans. The primary information source comes from twenty-eight interviews with the SLBs working in the two main federal environmental public institutions: Ibama and ICMBio.

The unit of analysis is the Brazilian environmental policy implementation within the scope of federal competence, focusing on the prevention and control of deforestation (Ibama Inspector) and the management of Federal Conservation Units (ICMBio Agent). In both cases, the emphasis is on the Amazon region. This territory requires the greatest concentration of efforts by Brazilian environmental institutions due to its enormous wealth of biodiversity and the country’s highest deforestation rates.

The Ibama Inspector and the ICMBio Agent are SLBs active in defence of the environment with similarities in terms of skills, training, and modalities of entry into public service. Nonetheless, they have differences concerning the main routines, modes of operation, and territorial delimitation. The Ibama Inspector acts as an environmental police officer, directing their action to repress crimes and other environmental illegalities. The ICMBio Agent is focused on managing the federal Conservation Units (UCs), caring for relations with traditional populations, and the sustainable use of natural resources.

In the policy implementation process, environmental SLBs, like other frontline agents, need to acquire specific capacities – both technical-administrative and relational – to deal with uncertainties and occurrences not formally established in regulations (PIRES; GOMIDE, 2016). Going deeper into the latter aspect, public policy field research demonstrates the problem of incomplete regulations: legal standards, as the result of political negotiation, often contain an amount of vagueness, indeterminacy, and ambiguity in language and goal definition (MATLAND, 1995). An unresolved problem at the policy formulation stage is then transferred to the implementation stage, leaving street-level bureaucrats a margin for interpretation and discretion (LIPSKY, 1980; LOTTA, 2018). This issue becomes even more critical in a complicated area such as the environment, where the public servant acts as State enforcement agents defending a collective and public good. For this reason, ambiguous and complex rules tend to provoke flexibility and discretion in their application, leaving space for opportunistic or illegal behaviours that threaten collective rights. In this sense, well-designed rules are the necessary tools to dissuade behaviours contrary to the interests of the collectivity through the adoption of inspections, preventive measures, and sanctions (SCHMITT, 2015).

In Brazil, the SLBs involved with environmental policy and their agencies have undergone intense formal and informal changes in the last years. Capelari *et al.* (2020) state that, under the Bolsonaro government, institutional layering, a process of gradual institutional change in layers, was broken, as there was an evident discontinuity in the implementation of environmental policy with a movement of abrupt deconstruction. In Araújo's study (2022), the reports of the respondents – all of them environmental public agents from Ibama – show the interruption of the gradual policy-building process that occurred primarily since the beginning of the Bolsonaro administration in 2019 due also to the breakdown of the mechanisms of production and transmission of technical information necessary to support the decision-making process (ARAÚJO, 2022; DONADELLI, 2020). In this sense, the Brazilian institutional context during the Bolsonaro administration, globally known for features of populism with democratic setbacks (BAUER *et al.*, 2021), inspired by an extreme right-wing political ideology (FERNANDES *et al.*, 2022; MENEZES; BARBOSA JR., 2021), as well as the intense dismantling process (BAUER; KNILL, 2014), led to constraints and tensions affecting the street-level bureaucrats' activities in relation to the implementation of Brazilian environmental policy, especially in the Amazon region.

Therefore, to analyse this relevant policy and public administration puzzle, this article has six other sections in addition to this one. The following section presents an overview of the evolution of Brazilian environmental policy, focusing on the inspection and control of deforestation in the Amazon region. The third section outlines the analytical model of the SLBs' action in the environmental area and the paper's hypotheses. In the fourth section, the methodological procedures are described. The fifth and sixth sections discuss the research results, showing the comparative analysis between bureaucrats from Ibama and ICMBio and their perceptions of the active dismantling of Brazilian environmental policy during Bolsonaro's administration. The last section weaves the final remarks, highlighting the research limitations and the risks and damages that these policy changes can lead to the environment policy subsystem and, more broadly, to the role of the Brazilian State.

2 THE CONSTRUCTION AND DISMANTLING OF BRAZILIAN ENVIRONMENTAL POLICY

The institutionalisation of Brazilian environmental policy is articulated on multiple fronts, such as ecological licensing, combating deforestation, preservation of native vegetation, fish and water resources, conservation units, and climate change mitigation efforts. During the last thirty years since the promulgation of the Federal Constitution, new dimensions and actors, collegiate bodies, independent agencies, and informal institutional arrangements were structured in the path of the environmental governance's building process (SEIXAS *et al.*, 2020).

Brazil had already committed to environmental preservation before the international community since the 1970s. A few years later, the 1988 Federal Constitution represented the main milestone in strengthening the institutions of Brazilian environmental policy, as it gave an even greater impetus to creating new laws, regulations, and regulatory agencies. From the constitutional recognition of the environment as an asset for everyday use by the people to be defended and preserved by the State and the community, the path of environmental laws and regulations has been consolidated in line with the international agreements stipulated by Brazil.

It is worth mentioning those related to the inspection and control of deforestation, such as:

- Law No. 7,735/1989, which created the Ibama;
- Law No. 9,605/1998 (Environmental Crimes Law), which represents the primary legal reference in the federal sphere about environmental inspection, inhibiting environmental crimes, and infractions;
- Law 9,985/2000, which creates the National System of Nature Conservation Units;
- Law 11,516/2007 creates the ICMBio, which assumes part of the assets, resources, personnel, positions, and functions linked initially to Ibama; and
- Law 12,187/2009, which defines the National Policy on Climate Change, containing both the consolidation of protected areas and the plans to combat deforestation, under the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon, approved by Presidential Decree in 2003.

It is necessary to characterise the two Brazilian federal institutions better. The main executors of environmental policy are the object of this study, Ibama and ICMBio. It requires providing some essential elements about their trajectory and functions, and bureaucratic structure in the context of Brazilian environmental governance. Part of this will be placed below, in this item, and part in the item on data and method.

Ibama was created in 1989, by Law No. 7,735/1989 (BRASIL, 1989), from the merger of four different institutions: the Special Secretariat of the Environment (Sema), with an important political role in the formulation of the National Environmental Policy (PNMA); and three other bodies more focused on fostering economic development, namely, the Brazilian Institute of Forest Development - IBDF, the Superintendence of Fisheries - Sudepe, and the Superintendence of Rubber - Sudhevea (ARAÚJO, 2022; IBAMA, 2018). Before the establishment of Ibama, the four institutions already active in the environmental area had limited role in environmental preservation, adopted different approaches, and sometimes pursued contradictory agendas. Thus, since its origin, Ibama has faced the challenges of overcoming internal conflicts among the various working groups and implementing Brazilian environmental policy in an integrated manner (IBAMA, 2018). For this reason, the constitution of

Ibama represents a milestone in the strengthening of Brazilian environmental governance. It is a tangible result of a long cooperation process between different social actors (IBAMA, 2018).

According to Law No. 11,516/2007 (ARAÚJO, 2022; BRASIL, 2007), Ibama holds the following attributions: a) to enforce the environmental police power; b) to execute, at the federal level, national environmental policy actions related to environmental licensing, environmental quality control, natural resources use authorisation, and environmental inspection, monitoring and control; c) to execute the supplementary actions of the Union's competence.

The Chico Mendes Institute for Biodiversity Conservation - ICMBio was created in 2007, from the dismemberment of the Ibama, through Law No. 11,516/2007 (BRASIL, 2007). The ICMBio is the federal entity responsible for implementing the National Policy of Nature Conservation Units, with the institutional mission of protecting the natural heritage and promoting socio-environmental development through the proposition, implementation, management, protection, inspection, and monitoring of the Conservation Units instituted by the Union - UCs (BRASIL, 2007; O ECO, 2013).

The ICMBio exerts the environmental police power to protect biodiversity in federal Conservation Units, inspecting and enforcing the appropriate penalties on violators, and is responsible for contributing to the recovery of degraded areas (ICMBIO, 2009; O ECO, 2013). Another important duty of ICMBio is to generate and disseminate information, knowledge, and technology through its research, protection, and biodiversity conservation programs throughout the country (O ECO, 2013). Therefore, the Chico Mendes Institute supports the implementation of the National System of Conservation Units (Snuc), which already existed before the ICMBio, due to Law No. 9,985/2000 (BRASIL, 2000).

Despite all these advances made incrementally in the legal framework since the promulgation of the Brazilian Federal Constitution and the commitments assumed by Brazil before the international community, in the Amazon region, pressure has persisted from political and economic agents who understand the protection of Indigenous and public lands as an obstacle to economic growth (ABRAMOVAY, 2010). These agents, in opposition to the principles of sustainable development and the more rational positioning of the exporting agribusiness, are carriers of a mercantilist logic, which exalts the economic exploitation of the abundant mineral and vegetal wealth existing in the Amazon region and uses, as an argument, the alleged desire of the Indigenous peoples to exploit their lands (VILANI; FERRANTE; FEARNESIDE, 2022). This logic can be considered consistent with neoliberalism, which, according to Castree (2008), involves the privatisation and commodification of nature since the market is understood as the best mechanism for allocating resources, even if they are public goods. Thus, nature becomes a means to the end of capital accumulation, where accumulation is accomplished by dispossessing other individuals, entire communities, and/or society (CASTREE, 2008).

In Brazil, democratic setbacks have intensified, especially from 2019, coinciding with the beginning of President Bolsonaro's mandate (SEIXAS *et al.*, 2020), whose political ideology managed to agglutinate as an electoral support base private economic groups interested in the depredation of the Amazon's natural resources – especially illegal logging and mineral extraction (VILANI; FERRANTE; FEARNESIDE, 2022). The signs of the crisis of Brazilian democracy, which had already revealed themselves in the 2013 protests and the fierce dispute between supporters and opponents of the Workers' Party in the 2014 presidential elections, and even more clearly in 2016, in the impeachment process of President Dilma, showed all their forcefulness in the campaign for the 2018 presidential elections. In this opportunity, it was possible to observe a growing distrust by part of society towards institutions (FERNANDES; TEIXEIRA; PALMEIRA, 2020).

Once elected president of the Republic, Jair Bolsonaro, in their first two years in office, accelerated the process of eroding the State from within, weakening institutions – especially those linked to the executive branch – and dismantling public policies in the areas of education, culture, citizenship, human rights, and the environment (AVRITZER, 2020). Since his election, Bolsonaro has demonstrated

explicit denial of scientific evidence in several areas of public policy (DONADELLI, 2020), adopting negationism on climate change and, later on, the health emergency of the Covid-19 pandemic, during which he repeatedly accentuated his anti-scientific attitude (AVRITZER, 2020).

According to Capelari *et al.* (2020), Bolsonaro's ascension allowed representatives of the so-called Traditional Developmentalists coalition to assume strategic positions within the government to explicitly push for the dismantling of the environmental governance system, making unilateral decisions aimed at accelerating liberalisation and privatisation processes in the areas of the economy and the environment, for example, the concession of national parks to private companies and the issuing of decrees aimed at encouraging mining on Indigenous lands or expanding permits for the use of pesticides by agribusiness, in clear conflict with public opinion, scientists, and sectors of organised civil society, especially environmentalists. The professional bureaucracy also received attacks during this process, as, in key areas such as the environment, it was removed from leadership positions without the possibility of opposing the process of erosion of public policies (CAPELARI *et al.*, 2020). To put it another way, the strategy undertaken in the environmental area by Bolsonaro's administration consisted of implementing a developmentalist agenda grounded in the market interests of allies in the extractivist sector, such as loggers, miners, cattle ranching, large-scale monoculture, and others, such as financial power players, regardless of environmental costs (MENEZES; BARBOSA JR., 2021). The indiscriminate and predatory extraction of natural resources to favour private interests can be associated with the concept of "total extractivism", which exceeds the idea of capitalist primitive accumulation. (MENEZES; BARBOSA JR., 2021, p. 241-242). According to Castree (2008), a possible reason that would explain the commodification of nature from the perspective of capital is that the degradation of natural resources produces profits. In the Bolsonaro era, this phenomenon became even more severe since the Brazilian government did not even bother to make any opposition to companies and groups seen as profit generators with absolutely no regard for the environment and other public goods, such as public health; quite the contrary, the Bolsonaro administration encouraged this kind of behaviour (MENEZES; BARBOSA JR., 2021).

As this process deepened, the negationist strategy in addressing environmental problems ensured State inaction (CAPELARI *et al.*, 2020) or the maintenance of a programmed inefficiency, which – through the centralisation of power in the federal government – limited the supervision and regulatory powers of the state bureaucracy (MENEZES; BARBOSA JR., 2021), allowed the distorted use of technical information and scientific data, and increased the space for environmental deregulatory forces to advance (CAPELARI *et al.*, 2020). According to Araújo (2020), another aspect of the calculated and ideological form of inaction in implementing the environmental policy was the alteration of non-statutory rules and the reduction of the budget.

The international literature on policy dismantling describes this process as a set of changes resulting in cuts, reductions, or even abolishing the budget, rules, laws, organisational structures, capabilities, and instruments of a policy or government sector (BAUER; KNILL, 2014). It is depicted, therefore, as an institutional change that affects the State's degree of commitment to a particular policy subsystem. According to Bauer and Knill (2014), policy dismantling, however, is not homogeneous and can occur in two dimensions of the policy mix: i) density, i.e., quantitative modifications of the policies and instruments, such as the reduction or the extinction of public programs effectively implemented in a certain period; ii) intensity - qualitative modifications in the policy mix by the degree of prioritisation granted to a sector in the governmental agenda or the decrease of operational resources, budget, and staff.

In Brazil, the environmental policies dismantling seems to have been intensified in both dimensions since 2019, when the Ministry of Environment, consistent with President Bolsonaro's denialist ideology on climate change and environment protection, began working in this direction. Among the most memorable events, the following are worth mentioning:

1. Extinction of the Secretariat of Climate Change and Forests;
2. Disqualification of the data provided by the National Institute for Space Research (Inpe) on deforestation and the exoneration of the president of this institute by the government, still in 2019;
3. The stimulus for wildfires, deforestation, illegal logging, occupation of Indigenous lands and Conservation Units, and clandestine mining;
4. Attacks on international agreements on climate change;
5. Flexibilisation of environmental norms using infra-legal acts and the presentation of bills that are harmful to the environment, such as Bill No. 3,729/2004, to simplify the procedures for granting environmental licenses, and Bill No. 2,633/2020, the so-called land-grabbing bill, on regularisation of improper occupation of public lands;
6. Release of native timber exports without the required export license, despite the contrary opinion signed by Ibama's career civil servants (Administrative Act No. 7036900, of February 25, 2020, issued by the president of Ibama, Eduardo Bim);
7. Removal of civil servants who held senior positions, especially in Ibama and ICMBio, replaced by political allies – mainly military agents – aligned with the government ideology, regardless of the lack of the necessary technical and relational skills (SEIXAS *et al.*, 2020);
8. Centralisation of decision-making on environmental policy issues in the federal government, with reduced autonomy of Ibama and ICMBio, and withdrawal of civil society representatives from spaces of discussion about environmental norms, as occurred with the alteration in the membership of the National Environmental Council - Conama and the National Council of the Legal Amazon - Cnal (MENEZES; BARBOSA JR., 2021).

The government's intention to proceed with deregulation was evident during the ministerial meeting of April 22, 2020, when the Minister of the Environment at that time, Ricardo Salles, defended the need to take advantage of the involvement of public opinion in the Covid-19 pandemic crisis to "to let the herd of oxen pass", i.e., to relax regulations that govern the implementation of public policies in Brazil (SUPREMO TRIBUNAL FEDERAL, 2021).

These events indicate that the process in motion is quite similar to the strategy of *Active Dismantling*, which focuses on high visibility with a strong and clear preference for dismantling in terms of density (abolition of policies or instruments) as well as intensity - reducing of funding and deregulation (BAUER; KNILL, 2014). Moreover, it is also embedded in a major worldwide tendency of populism with growing concerns about its impacts on the weakening of state capabilities and liberal-democratic backlash. In this particular case, the populist government undertakes this set of initiatives to reform or extinct the policy organisation, resources, rules, accountability basis, and, primarily, the bureaucracy values, goals, and means (BAUER *et al.*, 2021), with the effect of taking on the hallmarks of an authoritarian, anti-democratic regime (MENEZES; BARBOSA JR., 2021).

The first evidence of the paralysis of deforestation inspection under the Bolsonaro administration can be found by analysing the data on the notifications issued by Ibama for violations against the flora. The average number of fines issued in the 2018-2021 period was 2,943, which, compared to the 2008-2018 period (5,018), is equivalent to a drop of 41.3% (OBSERVATÓRIO DO CLIMA, 2022). As a result of this process, Brazil has registered an increase in the deforestation rate in the Legal Amazon of more than 75.6% during the period 2018 to 2021 (INPE, 2021), and, in the environmental area, has progressively lost its role as a protagonist in relations with the most influential countries on the world political stage.

3 ANALYSIS MODEL AND RESEARCH HYPOTHESES

To advance on the SLBs' perception of the dismantling impact on their behaviour and performance, the paper relies on an analytical model of the implementation process that combines different approaches based on the distinct positions found in the literature. Therefore, the institutional, individual, and relational dimensions were placed in a dialectic relation, which provided a view beyond the limitations of each one and their contribution toward an advance in knowledge on the topic (BONELLI *et al.*, 2019).

In this regard, D'Ascenzi and Lima (2013) propose a more fluid understanding of the concept of implementation, which could be understood as the result of the interaction between the set of guidelines expressed in a plan and the elements that define the actual context, including power relations established in the workplace. Plans and regulations can be conceived more flexibly as socially constructed objects and potentialities of intentions to be tested, continually interpreted, adapted, and improved by the actors involved in the implementation process (LIMA; D'ASCENZI, 2013). The individual action can be understood as an agency, explained by incentives, values, and beliefs (MAYNARD-MOODY; MUSHENO, 2015); the interactions can be conceived as cooperative or confrontational relations among different actors whose interests may not be aligned (LOTTA, 2018).

All this makes it possible to understand how, within a complex system such as the implementation of environmental policy, the institutional dimension is confronted and renewed in a dialectical tension with the agency and the multiple relationships established inside and outside a given organisation. Therefore, in the analysis, we include the agency of individuals and networks of organisations and agents that make up the system from the point of view of their interactions.

All these elements are covered in the analysis model, elaborated from the theoretical construct presented in the article by Bonelli *et al.* (2019). The model comprises three dimensions and their respective indicators, as Figure 1 shows below.

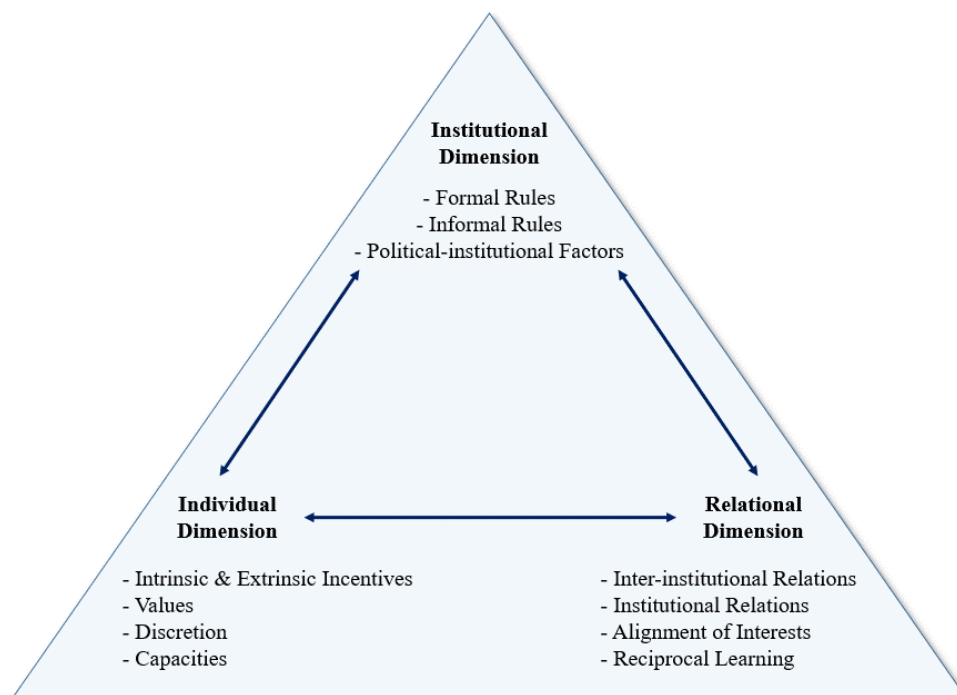


Figure 1 | Analysis model of environmental street-level bureaucrats' action

Source: authors' elaboration.

Below is a brief explanation of the composition of the analysis model, highlighting the indicators that make up each of the dimensions:

- **Institutional dimension.** Besides the formal rules, related to a Weberian view of institutional structures, the existence and influence of informal rules in the agents' actions were considered. It is understood that informal and formal rules are fundamental for regulating the interactions between different social actors. They must be included to understand the nature and functioning of institutions fully. Political-institutional factors have also been added, as they have been shown to influence policy implementation. In Brazil, supplementary action by the Union is necessary, mainly through the federal autarchies, in those states that cannot adequately confront environmental crimes resulting from collusion between offenders and local politicians. For instance, in Brazil, additional action by the Union, mainly through the federal autarchies, is needed in states that cannot adequately address environmental crimes resulting from collusion between offenders and local politicians.
- **Individual dimension.** We simultaneously contemplate incentives (intrinsic and extrinsic) and values because we understand that agents' behaviours are not necessarily motivated by cost-benefit calculations, as pointed out by the Agency Theory). We believe that the same agents, depending on contingencies, may adopt, in a given circumstance, opportunistic behaviours and, in another case, cooperative behaviours, without necessarily being altruistic. It should be noted that despite developing the dialectic tension between structure and agency (BARRETT, 2004), discretion is also understood as an indicator of the individual dimension. As for capacities, we consider that, in addition to technical-administrative capacities, public agents must also have political-relational capacities, which relate to the skills of interlocution, conflict negotiation, and consensus building (PIRES; GOMIDE, 2016).
- **Relational dimension.** Compared to the theoretical construct presented in the article by Bonelli *et al.* (2019), indicators of institutional and inter-institutional relations and alignment of interests were inserted; on the other hand, the indicator of reciprocal learning was maintained. In this sense, it is understood that learning can be developed from the interaction of different social actors, who, even if they have other interests, may feel encouraged to experiment with new methods and techniques jointly and, in this way, obtain more satisfactory results.

Thus, we adopted the analytical model to investigate, based on the SLBs' perception, the impact of Bolsonaro's administration's dismantling strategy on the enforcement of norms and structures defined in the environmental policy, as well as on informal rules, political-institutional factors, individual agents' conducts, and their mutual interactions, and to assess its effects, especially on the implementation of inspection and control of deforestation plans in the Amazon region. This leads to the first hypothesis of this article:

Hypothesis 1: The changes undertaken by President Bolsonaro's administration on the environmental policy implementation affect the adherence to formal and informal rules and the containment of political-institutional factors (institutional dimension), the conducts of SLBs (individual dimension), and their interactions (relational dimension), undermining the functioning of Brazilian deforestation inspection and control system.

On the other hand, it is also necessary to understand the dynamics of disruptive change that lead to institutional weakening and dismantling of the environmental policy after a certain degree of erosion of the founding dimensions of the SLBs' action. This process, despite the possible resistance from the agents (BAUER *et al.*, 2021), is translated, in fact, into the disabling of programs and management

instruments, the dismantling of institutions (MENEZES; BARBOSA JR., 2021), the reduction of budget and organisational structures (ARAÚJO, 2022), the loss of individual and institutional capacities, and the emptying of partnership relationships (BAUER; BECKER, 2020; BAUER; KNILL, 2014). In the case of inspection and control of deforestation plans, the empirical investigation conducted in this paper allowed us to map the perception of the SLBs about the erosion of institutional structures and mechanisms and their deviation from the mission of preserving the Amazon.

Therefore, from the understanding of the constitution of the founding elements of Brazilian environmental policy, with a focus on the inspection and control of deforestation, the model needs to be dynamically directed to understand, also, the active dismantling process, which corresponds, in our model, to the corrosion of the institutional, individual and relational dimensions.

Thus, by identifying the distortions of the foundational elements of the SLBs' daily actions and their effects, the model we adopt in this work allows us to understand how the process of disruptive change takes place (BAUER; BECKER, 2020), which, in the context proposed for this article, leads to the hypothesis of the active dismantling of the Brazilian inspection and control of deforestation system.

According to Bauer and Becker (2020), the definition of the goals of populist public administration policy depends on the different possible combinations between administrative order, that is, the embeddedness of the professional bureaucracy in the structure of public administration (fragile or robust), and the view of the state by the government in power (positive or negative). In a situation in which a negative view of the state is combined with a fragile administrative order, as in the Brazilian case, it is plausible that a populist government, such as the previous one, pursues a strategy of dismantling rather than one of sabotage, which would occur if Brazilian environmental bureaucratic structures were more consolidated.

From the point of view of the frontline agents, it is possible to relate the types of behaviours identified from the primary data extracted from the interviews conducted with Ibama and ICMBio SLBs with the categories defined by Bauer *et al.* (2021) on the reaction of the bureaucracy when faced with an active dismantling strategy conducted by populist governments (BAUER; KNILL, 2014), a process that, in the case of Brazil, was characterised by abrupt changes undertaken by an extreme right-wing populist government (MENEZES; BARBOSA JR., 2021). As stated by Bauer *et al.* (2021), civil servants confronted with this situation can react in three ways: working, shirking, and sabotaging. In the first case, agents, more politically aligned to the government, follow the orders received by their superiors; on the other hand, in the second and third cases, respectively, they avoid confrontation, seek exit strategies (shirking), or resist attacks (sabotage) aimed at dismantling structures, resources, personnel, norms, and accountability relationships of public institutions (BAUER *et al.*, 2021).

Therefore, the theoretical argumentation developed so far allows the construction of the second research hypothesis, presented below:

Hypothesis 2: The active dismantling of the deforestation inspection and control system in Brazil consists of the corrosion of the institutional dimension due to the deregulation and weakening of formal and informal institutional arrangements, the paralysis of bureaucratic capacities (individual dimension), and the disarticulation of partnership networks (relational dimension).

4 DATA AND METHODS

The research strategy was case-oriented, aimed at deepening the underlying relationships among cases selected for their significance in understanding the phenomenon (RAGIN, 2008).

A cross-case analysis was performed to examine the action of two different profiles of SLBs operating in the context of Brazilian environmental policy: the Ibama Inspector and the ICMBio Agent. These two categories of agents were deliberately selected because they differ in the role, activities, *modus operandi*, and territorial delimitation of their function.

In order to better characterise and size the two institutions, here are some data about their respective structures and workforces.

Ibama, besides the headquarters in Brasília, has 27 Superintendencies that operate in their respective Federation Units (UFs), developing an inspection activity that complements that of the States (IBAMA, 2023; PINHEIRO *et al.*, 2022). With regards to the number of Ibama professionals, the data collected in this research allowed us to estimate that the institution had less than 3,000 employees (2,784 at the end of 2022, according to data from the *Portal da Transparência - Controladoria-Geral da União* [Office of the Comptroller General of the Union's Transparency Portal] (BRASIL, 2023), of which 1,200 were located at the headquarters, and the rest spread throughout the country, against the 5,000 positions available. According to the reports from our interviews, as a consequence of the general decrease in the number of Ibama's public servants, the number of Inspectors – agents designated for environmental inspection by administrative order – fell abruptly from 1,680, accounting in 2008 to about 700, estimated in early 2020. Of this number, only over 400 agents were working in the field, while the other half were performing administrative activities.

As for ICMBio, our research found that the institute manages 334 Conservation Units (UCs) scattered from north to south of the country, whose combined areas correspond to almost 10% of the entire national territory, equivalent to 171,424,192 hectares (ICMBIO, 2021). The federal Conservation Units located in the Amazon total 125, occupying a surface area of 63,504,455 hectares, equivalent to 15% of the Brazilian Amazon territory (ICMBIO, 2021). According to updated data from ICMBio (2023), the institute counts 1,705 public servants (including 66 nominated to commissioned positions), of which 971 are Environmental Analysts (almost 57% of the total), 237 Administrative Technicians (14%), 222 Environmental Technicians (13%), 36 Administrative Assistants (2%), and 26 Administrative Analysts (1.5%). Note that these estimates do not include outsourced employees who work in the field, as, for example, fire brigades. As for the number of ICMBio's agents responsible for environmental inspection (Federal Environmental Agents), the data obtained in the interviews allowed us to estimate that, of the approximately 1,700 public servants, around 900 would be Inspectors nominated using an administrative order and that, of this total, around 600 would work in Conservation Units located in the Amazon region. However, it is estimated that only about fifty are dedicated to environmental enforcement actions in the field.

In this article, the environmental policy analysis implemented by ICMBio's agents is limited to the federal Conservation Units (UCs) located in the Legal Amazon. According to Law No. 9,985/2000, which institutes the National System of Conservation Units, the Conservation Units are subdivided into two large groups according to their different purposes, namely: Integral Protection, whose purpose is to preserve nature, allowing only the indirect use of its natural resources; and Sustainable Use, whose purpose is to make nature conservation compatible with the sustainable use of part of the natural resources (BRASIL, 2000).

The research time frame was from 2004 to 2021 for Ibama, and 2007 to 2021, for ICMBio, focusing on comparing the first three years of the Bolsonaro administration and previous mandates. The techniques used for data collection were semi-structured and in-depth interviews and documentary research. The script, built from the analysis model, was adapted according to the two different interviewee profiles and was used as a guide to let the field speak and to orient the researchers' work. Considering the extensive time frame adopted, the questions addressed to the interviewees from both institutions were aimed at comparatively examining how the three different dimensions of the SLBs'

action and their respective indicators have evolved throughout the different administrations of the Brazilian federal government and, especially, how they were affected during the last mandate.

Documents such as laws, decrees, regulations, reports, and other relevant files were used throughout the document analysis to corroborate the primary data obtained in the interviews using the triangulation technique (DENZIN; LINCOLN, 2005).

The texts of the interview transcripts were examined using Systematic Content Analysis (SCA), based on the procedures described by Hall and Wright (2008) and Salehijam (2018), with adaptations depending on the research objective and data available.

The SCA was articulated in the following steps: a) selection of cases by convenience, using the “snowball” technique; b) coding of texts, adopting consistent criteria to ensure reproducibility; c) analysis of coded contents, with the help of a field diary and memos to deepen the understanding of the statements and place the evidence correctly on the timeline throughout the period considered, constantly triangulating with data from secondary sources; d) analysis of coding frequencies using descriptive statistics. NVivo 12 Plus software was used to streamline the procedures of archiving, systematising, and processing the information.

The method adopted, expensive in terms of time spent to conduct the interviews, interpret and codify the texts obtained from them, led the authors not to employ techniques that would allow a more accurate description and a broader graphic and tabular expression of the phenomenon, as would be possible if, for example, the survey method was used. Thus, simple descriptive statistical techniques, such as average and standard deviation, were applied only to analyse the frequencies of the indicators of the analysis model, to represent, in a more objective way, the interviewees’ statements, and to favour the understanding of comparisons between the agents of the two institutions.

Twenty-eight interviews were conducted from March 2019 to September 2020, fourteen for each institution. The interviewees were chosen, adopting the “snowball” method (SIERRA, 1998), among street-level bureaucrats at Ibama and ICMBio. Thus, from a preliminary list of participants made available by the agents contacted intentionally at the beginning of the field research, the remaining interviewees were selected based on the indications obtained as the empirical work advanced (SIERRA, 1998). In the case of Ibama, the unit of assignment of the Inspector was not a criterion used for the interviewee’s choice since the Federal Environmental Agents are assigned, on a shift basis, to work in the Legal Amazon, regardless of their state of origin. In the case of ICMBio, twelve different Conservation Units located in the Amazon region were selected by convenience.

Considering that a qualitative technique was adopted, the number of interviewees was not calculated a priori according to sampling criteria, based on the logic of proportionality and statistical representativeness (SIERRA, 1998; VALLES, 1997), but as many individuals as necessary participated until the theoretical saturation of the indicators was reached. The participants freely made their statements so that their identities and personal data would be kept confidential. Considering the small number of Ibama inspectors (700 individuals) and ICMBio agents working in Conservation Units of the Legal Amazon (600 individuals), as well as the high number of variables (twelve in total) included in the three dimensions of the analysis model, we decided not to conduct a survey, as it would be unfeasible to reach a sufficiently representative sample size for the validation of the factor analysis. Assuming a tolerable sample error of 4%, it would be necessary to reach a percentage of respondents close to 47% and 51% of the population of Ibama and ICMBio agents, respectively.

Given the scale design with a high number of questions (close to 100) and the historically proven difficulty in achieving a response rate higher than 25%, especially in surveys conducted online and without prior contact with the potential respondent (HIEBL; RICHTER, 2018), the format would tend to leave the two samples underrepresented and would not allow, in any way, the generalisation of the

results. Based on this, we prioritised semi-structured and in-depth interviews rather than a survey. Experts in the field, who were explicitly consulted on this matter, corroborated this decision.

5 THE SLBS' PERCEPTION ABOUT DEFORESTATION INSPECTION AND CONTROL IN BRAZIL: COMPARATIVE ANALYSIS IBAMA VERSUS ICMBIO

To show more objectively the results of the comparative analysis between the cases of Ibama Inspectors and ICMBio Agents, we counted the frequencies, in absolute value, of each indicator in each of the statements collected with the civil servants of the two institutions. Subsequently, the percentage frequencies of these indicators were obtained for each of the two organisations by dividing each case's absolute frequencies by the indicator's total frequency and adding the values assigned to each case to compose the aggregate percentage value, respectively, for Ibama and ICMBio. Thus, Figure 2 below briefly shows how the percentage frequencies of each indicator of the analysis model are distributed among the set of cases of the two institutions. The spheres are drawn in proportion to the total percentage value of each indicator. For comparative purposes, the overlapping sphere is associated with a higher percentage frequency in observing each indicator between the two institutions.

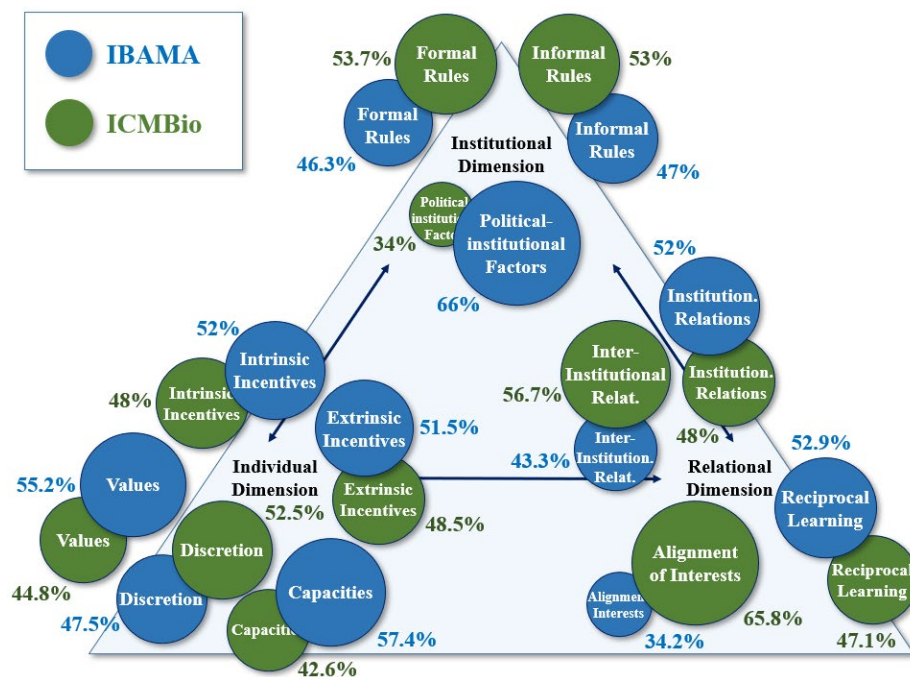


Figure 2 | Distribution of indicators frequencies comparing the cases of Ibama and ICMBio

Source: authors' elaboration.

Observing the aggregated data of the indicators of the **institutional dimension**, it is worth noting the concentration of “political-institutional factors” in Ibama (66%) compared to ICMBio (34%). The Inspectors of Ibama emphasised, in their statements, the impact of political pressures internal and external to the entity on enforcement actions, as is reflected in the following testimony about the actions of public managers appointed by the government:

Now, it is impossible for us to stand here and watch environmental public managers who are doing nothing in areas that Ibama has embargoed, where the white man enticed the Indians, went inside the indigenous land, mechanised the soybeans, exploited the soybeans there, against the Constitution,

against the Indigenous Statute, against the Biosecurity Law, totally outside the law and still internalised this production in the market. And today's public managers are so there, you know, demeaning the legislation. It's sad, isn't it? (Interview No. 2, authors' translation).

On the other hand, the performance of ICMBio Agents – characterised by more heterogeneous activities – does not seem to be so affected by the behaviours of political agents, according to the interviewees.

In the **individual dimension**, the elements that show the most significant discrepancies between the cases of Ibama Inspectors and ICMBio Agents are “capacities” and “values” since the former is distributed in the proportions of about 57% for Ibama and 43% for ICMBio; and the latter reach, respectively, around 55% and 45%. In Ibama Inspectors' statements, greater emphasis was placed on the importance of capacities (technical-administrative and political-relational), the role of values, and the influence of both categories on their actions, especially during inspection operations. In the case of ICMBio Agents, it results that, due to the nature of their work – which includes socio-environmental management as a fundamental component, in addition to other quite heterogeneous tasks –, on the one hand, the baggage of capacities does not need to reach the same level of specialisation as that of Ibama Inspectors; on the other hand, the set of individual values are less predominant, mainly because the Conservation Unit managers are socially embedded in the community where they work and, therefore, by the need to put collective interests before individual ideals and beliefs.

The “intrinsic” and “extrinsic incentives” show a slight predominance of the concentration of these indicators in Ibama (around 52%) compared with the Chico Mendes Institute (about 48%). The data also show that ICMBio's public servants resort more to using discretionary power (52.5%) than Ibama's Inspectors (47.5%). The Chico Mendes Institute's Agents, in their daily activities, need to resort to dialogue, negotiations, consensus building, and reaching agreements among the various stakeholders due to their functions related not only to the protection of biodiversity but mainly to environmental education and socio-environmental management in collaboration with other social players.

As for the evaluation of the results of the **relational dimension**, the results show, in general, the highest concentration of indicators in the cases of the ICMBio, because the action of its agents, compared to Ibama's Inspectors, is less focused on enforcement and more prone to weaving inter-institutional relationships. The two indicators, “alignment of interests” and “inter-institutional relations”, reveal this characterisation since, for the ICMBio, the percentages reach almost 66% and 57% against 34% and 43%, approximately registered in the cases of Ibama. On the other hand, in the latter institution, there is a prevalence of relationships established with professionals from the same institution (52% versus 48% for ICMBio). This aspect is quite characteristic of the work of Ibama Inspectors. When working in teams composed of SLBs from different states, they need to develop strong cohesion within the team and promote intense knowledge exchange. Finally, the “reciprocal learning” indicator, which in the case of Ibama reaches a percentage of almost 53% (about 47% in the case of ICMBio), is due precisely to the greater intensity that the inspection work of the first institution requires in terms of the exchange of experiences and technical knowledge within their teams.

The analysis of the opinions collected in the interviews allowed us to understand, at the micro level, how perceptions vary among the agents of the two institutions studied about the main elements that characterise their actions in implementing environmental policy. The synthesis of the main aspects identified in the statements, with the peculiarities that distinguish each one of the two organisations, is displayed in Table 1 below:

Table 1 | Summary of the comparative analysis between the Ibama and ICMBio cases

IBAMA	ICMBIO
The political-institutional factors have a greater influence on the actions of Ibama SLBs	Formal rules, informal rules, and discretionary power have a similar weight between the two institutions, with a slight predominance at the ICMBio
The capacities, values, and, to a lesser extent, the incentives show a greater incidence from the point of view of Ibama Inspectors	At the ICMBio, inter-institutional relations have a greater influence compared to institutional relations, as its Agents are socially embedded (their actions require building consensus with other public entities, communities, local producers, and other socio-economic actors)
Institutional relationships prevail due to the relevance of knowledge exchange between the Federal Environmental Agents coming from different regions of Brazil for the execution of environmental inspections	The work inside the institution is developed in a more individualised way and seems less permeated by team spirit
Ibama Inspectors more often use the institutional doctrine, the baggage of skills, and the guidance of the team coordinators	

Source: authors' elaboration.

From the primary data analysis, it is also worth noting that, in both entities, the “intrinsic incentives” are strictly linked to the set of “values” of the environmental agents (identification of the individual ideal of defending nature with the institutional mission); the degree of “discretion” adopted in environmental enforcement correlates with the technical and relational “capacities” of the agents (knowledge of the legislation and ability to apply the rule to the factual situation). The environmental policy enforcement benefits from applying “informal rules” and routines that favour the adaptation of “formal rules” to the specific situation and/or the local context, as long as the principle of legality is not contradicted.

The empirical evidence shows that, despite the specificities of Ibama and ICMBio, the institutional, individual, and relational dimensions and their respective indicators are compatible with each other, defined concomitantly, and ground the action of the bureaucrats who implement inspection and control of deforestation plans in both institutions, confirming the first research hypothesis, based on the SLBs perception.

6 DEFORESTATION INSPECTION AND CONTROL AFTER THE BEGINNING OF THE BOLSONARO ADMINISTRATION

In addition to comparing the performance of frontline agents working in the two institutions studied, this research also observed elements that allowed us to evaluate the environmental policy transformations that occurred after the beginning of Bolsonaro’s term. This aspect is related to the changes implemented by this government regarding the institutional dimension, with repercussions on the individual and relational dimensions, such as changes in infra-legal norms, attempts to reform legislation, political pressure on public agents, dismissals of public servants trained in the fight against deforestation and environmental preservation, and the appointment of military personnel without the necessary expertise. This is clear evidence of strategies of populist public administration policy, whose goals are oriented towards dismantling, coherently with what was pointed out by Bauer and Becker (2020) about democratic backsliding caused by populist governments.

In most interviews, two conceptual categories emerged without being directly asked of the participants: “environmental policy dismantling” and “institutional weakening” of the leading entities responsible for implementing the environmental agenda. Therefore, we decided to return to the text of each interview, and we verified the presence/absence of these variables and the temporal marker associated with their occurrence – whether before or after the beginning of the Bolsonaro government’s mandate. We also checked the condition of each respondent regarding the continuity, or not, in the exercise of the respective senior position, if any. Considering that fourteen Ibama

Inspectors and fourteen ICMBio Agents were interviewed, it was possible to calculate the incidence of each variable over the total of each group of interviewees and thus calculate (and compare) the percentage frequencies between the two institutions (Ibama Frequency versus ICMBio Frequency), as well as obtain the total percentage of all twenty-eight respondents (Overall Frequency). It is also worth noting that the variables “environmental policy dismantling” and “institutional weakening” are not mutually exclusive. Thus, it was possible to verify, in most cases, that the same interviewee stated that, at the same time, both policy dismantling and institutional weakening occurred in the respective institution. Thus, Table 2 reports the frequencies of the variables described above.

Table 2 | Poll on institutional changes in environmental policy “after Bolsonaro”

	<i>Environmental policy dismantling</i>	<i>Institutional weakening</i>	<i>Removal from senior position</i>	<i>After Bolsonaro</i>
Ibama Total	13	14	6	13
Ibama Frequency	93%	100%	43%	93%
ICMBio Total	6	12	2	7
ICMBio Frequency	43%	86%	14%	50%
Overall Total	19	26	8	20
Overall Frequency	68%	93%	29%	71%

Source: authors' elaboration.

Table 2 shows that in Ibama, there is a strong alignment between the Inspectors who evaluate that there is a process of environmental policy dismantling and those who state that this process began with the advent of Bolsonaro's term, as the respective variables both show the same value (around 93%). It is possible to observe the exact alignment in the ICMBio Agents, but to a much lower degree, with the importance of the variables “environmental policy dismantling” and “after Bolsonaro” corresponding, respectively, to about 43% and 50%. Thus, it is possible to state that almost all the Ibama Federal Environmental Agents perceive the profound institutional changes undertaken by the previous government in environmental policy and its deleterious effects; on the other hand, in the Chico Mendes Institute, the SLBs are quite divided on this issue.

Regarding institutional weakening, it can be argued that Ibama Inspectors are unanimous about the occurrence of this phenomenon in the Brazilian environmental area (100%) and that the vast majority of ICMBio Agents have a similar position (around 86%), but without necessarily linking this process to the actions of the Bolsonaro government.

According to the results of the cross-time poll conducted in this research, there has been a strong impact of the Bolsonaro government on the removal of civil servants with senior positions, as Bauer *et al.* (2021) indicate. The results show that this effect has been greater in Ibama than in ICMBio (about 43% and 14% of respondents, respectively). This may have affected the participants' opinions regarding evaluating the institutional changes and their effects.

As for the aggregated data, it is relevant to note that, according to almost 93% of the respondents, there is an ongoing process of institutional weakening in the environmental area, which, for most of these respondents (about 71%), can be attributed to the actions of the Bolsonaro government.

Similarly to what was put about the data from the Ibama cases, there is also an alignment, at the aggregate level, between the SLBs who believe in the dismantling process of environmental policy and those who understand that this process began after the start of the Bolsonaro administration, as the variables present, respectively, the values of around 68% and 71%. The testimonies of the environmental agents show their bewilderment in the face of the deconstruction of the environmental policy pursued by the Bolsonaro administration, as is clear from the following excerpt:

The government has messed with this [the regulations] a lot. It leaves you a little bit, in my opinion... a little bit perplexed. You don't really know what course the government wants to take, the strategic direction of the public policies. [...] All the time, we see that there are modifications in the regulations, but they are due to the interest of some groups (Interview No. 9, authors' translation).

In sum, according to the respondents' opinions, after three decades of incremental progress, Brazilian environmental policy was the object of a dismantling process by the former government through the corrosion of the founding dimensions of the action of its SLBs, among which stand out the loss of bureaucratic capacities and decision making guided by opportunism rather than technical criteria, as can be observed in the following statements:

Staff replacements compromise too much the management of the work, the management of the institution... it compromises too much because the whole direction that would be on a line of conduct is changed by people who don't know the house, don't know the institution and will create their own rules [...] (Interview No. 6, authors' translation).

So these people come – right? – that I call aliens, and they simply come to do things that only interest that politician, that businessperson who managed to get them appointed to office. (Interview No. 14, authors' translation).

This result coincides with what is pointed out in recent research about the weakening of democratic institutions and the active dismantling of public policies (BAUER; BECKER, 2020; BAUER; KNILL, 2014), especially in institutional contexts shaped by changes promoted by far-right populist governments (CAPELARI *et al.*, 2020; LEVITSKY; ZIBLATT, 2018; MENEZES; BARBOSA JR., 2021). In effect, the bureaucratic overhaul, whereby career civil servants are removed from their senior positions by political will or for choosing the exit for fear of persecution, is illustrated in studies on the impacts of policy dismantling produced, in various countries around the world, by extreme right-wing populist governments on the professional bureaucracy.

We witnessed in Brazil under Bolsonaro a process of undoing public policies (not only in the environmental area) by a government that, apparently acting within the framework of legality, combined a strategy of inaction (ARAÚJO, 2020; CAPELARI *et al.*, 2020) with an ongoing work of dismantling already consolidated policies and deteriorating its own institutions (BAUER; KNILL, 2014; MENEZES; BARBOSA JR., 2021).

The active dismantling of the Brazilian environmental policy, with a focus on the inspection and control of the deforestation system, is represented through a version of the model capable of capturing the distortions that occurred after the advent of the Bolsonaro administration (Figure 3 below).

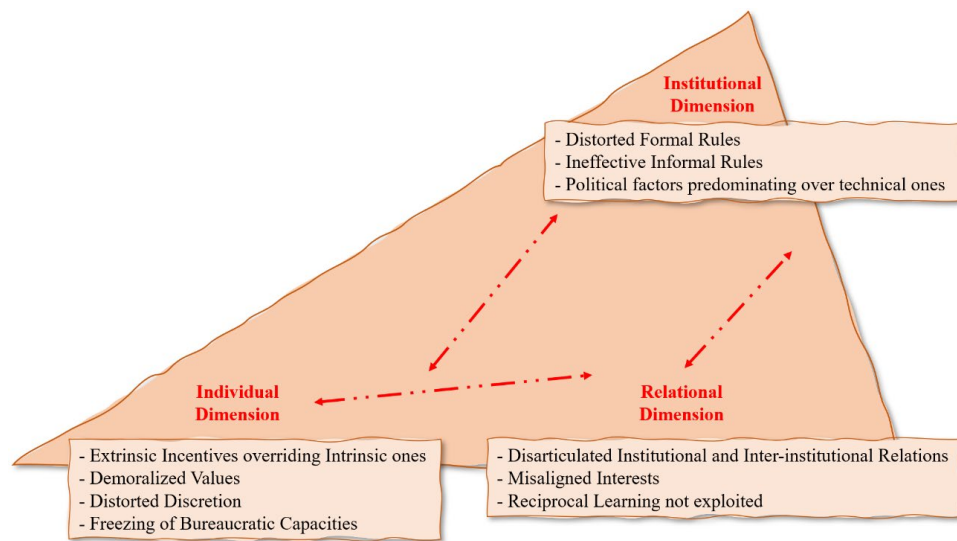


Figure 3 | Active dismantling of Brazilian deforestation inspection and control system

Source: authors' elaboration.

The information collected in the interviews shows that the weakening of Ibama and ICMBio was perpetrated through deregulation at the infra-legal level, removals of experienced Inspectors from senior positions, and President Bolsonaro's attacks on environmental agents that, far from being mere rhetoric, was an expression of a political tactic to legitimise environmental violations (MENEZES; BARBOSA JR., 2021). This conduct of the previous federal government undermined the daily activities of the frontline agents, whose response in the field mainly expresses resistance to abuses and interference in a context of growing conflicts with violators, but that is not without a general feeling of discouragement, as is evident in the following excerpts:

The agent, poor fellow here on the frontline, can't enforce the law when there is an example from the *Planalto* that speaks against it, right? This attitude puts the public agent, instead of the criminal, as a bandit, which is the situation that all inspectors live today, right? (Interview No. 17, authors' translation).

The removal of experienced agents from leadership positions is our big concern, you know? Because they are people who work well, who know what they are doing, who have experience. We are kind of devastated to see a situation like this. We see the dismantling of a structure that was already working! (Interview No. 10, authors' translation).

Thus, the institutional changes have affected the individual dimension – with the removal of historical leaders and the appointment of chiefs without the necessary skills – and the relational dimension – with the loss of inter-institutional partnerships established over the past decades. According to Donadelli (2020), consensus building and interdependence among different stakeholders are necessary for scientific evidence to be used productively in policymaking. From this, we understand that demobilising these institutional and inter-institutional relationships is another aspect that confirms the intentional dismantling of environmental policy. The acceleration of the increase in deforestation rates in the Legal Amazon observed mainly from 2018 to 2021 is the most tangible consequence of this phenomenon.

In short, the result of the deconstruction of the fundamental dimensions of the SLBs' action was the progressive corrosion of the two main Brazilian environmental entities and the active dismantling

of the inspection and control of the deforestation system, which presented itself with its deformed structure, confirming the second research hypothesis.

7 FINAL REMARKS

The paper investigates how Bolsonaro's administration has affected the environmental policy implementation in Brazil, especially by the street-level bureaucrats' (SLBs) perception. As a result, the findings confirm that an active dismantling process is in motion and undertaken in different forms, such as deregulation, weakening of federal environmental institutions, disconnection of public servants from motivations, values, and principles, paralysis of individual and organisational capacities, distortion of the SLBs' discretionary power, and emptying networks of institutional and inter-institutional relations.

Different trajectories of institutional structures, individual action, and interpersonal relationships coexist in the performance of frontline bureaucrats who implement Brazilian environmental policy. Thus, depending on the level of development and strengthening of these dimensions, the action of federal environmental agents oscillates between the fulfilment of the institutional mission, resistance in maintaining operations – despite contradictory orders – and, at the other extreme, weakening that leads to conducting operations of limited impact or even inaction.

The changes undertaken by the Bolsonaro administration produced, in three years, the weakening of the agencies, with the paralysis of bureaucratic capacities and setbacks in inspection and control of the deforestation system in Brazil.

More specifically, the results point out that the Bolsonaro government ruptured the balance between the founding elements of Brazilian environmental policy. In effect, the institutional dimension, acting as an activating element, affected both the individual dimension, through the removal of experienced agents from senior positions, and the relational dimension, with the disarticulation of the relationships established in the policy community.

Despite the dismantling process, the pillars of the SLBs' actions continue to resist, even if hidden or latent. However, the bureaucratic capacities, as well as institutional and inter-institutional relations, have the potential to be reactivated. This question will be addressed in future research: how and under what conditions will it be possible to put the structures and mechanisms of Brazilian environmental governance back into the entire operation? Another critical focus is to explore the reactions expressed by the environmental agents in the face of the active dismantling promoted by the Bolsonaro government, whether it fits as shirking, sabotage, or working (BAUER *et al.*, 2021), or other categories emerging from the fieldwork.

The main limitations of this study are related to the methodological procedures and the operationalisation of the empirical research.

First, it is worth considering that the analysis strategy adopted involved a certain margin of subjectivity in interpreting the interviews. Even so, efforts were made to ensure reliability and reproducibility in coding the statements and to maintain the necessary distance from the participants' opinions.

Second, there are some limitations related to choosing a case-oriented research strategy. The present work did not aim to measure variables based on data extracted from a representative sample so that the results could be considered statistically significant, nor to study the cause-effect relationships between the SLBs' action indicators and a dependent variable. Therefore, the research results, although indicative of the understanding of the phenomenon, cannot be generalised.

However, considering the scope defined for this research and the limitations of time and resources, it is evaluated that the objective of this work was achieved.

In short, this paper has shed light on how important it is for Brazilian environmental policy to keep solid institutions, bureaucratic capacities, and partnership networks functioning. Integrating all these elements allowed significant advances in the incremental building of this governance arrangement.

Conversely, it took only three years of the Bolsonaro government to undermine a considerable part of the progress made in the three decades after the country's re-democratisation.

From the results presented, it is understood that although the diffuse right to preserve the environment is constitutionally recognised, the Brazilian environmental policy still needs stricter regulation. In this sense, consolidating the professional bureaucracy's role, guaranteeing substantive autonomy of the agencies, and establishing mechanisms to encourage territorial planning and sustainable, productive activities become imperative. Thus, although this research agenda needs to be further explored, we believe that our article contributes to the advancement of knowledge about the strategies that a far-right populist government can deliberately adopt to dismantle already consolidated public policies and favour particular interests of groups that benefit from reducing the roles of the State and professional bureaucracy.

NOTE

1| According to Law No. 12,651/2012, known as the 'New Forest Code', Legal Amazon is defined as "the States of Acre, Pará, Amazonas, Roraima, Rondônia, Amapá and Mato Grosso and the regions situated north of the 13° S parallel, in the States of Tocantins and Goiás, and west of the 44° W meridian, in the State of Maranhão." (BRASIL, 2012, Art. 3, I, our translation). This area is estimated to occupy 59% of the Brazilian territory (O ECO, 2014).

ACKNOWLEDGEMENTS

The authors thank the National Council for Scientific and Technological Development (CNPq) for its support through the Universal competition notice and the anonymous reviewers for their critical and detailed analysis and valuable contributions.

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