

ASSESSMENT OF THE IMPACTS OF ENVIRONMENTAL LEGISLATION ON THE EFFECTIVENESS OF PUBLIC POLICIES <https://doi.org/10.63330/aurumpub.021-001>**Fernanda Barrozo Oliveira¹****ABSTRACT**

This study aims to analyze the impacts of environmental legislation on the effectiveness of Brazilian public policies, investigating whether the extensive existing normative framework has translated into concrete results for environmental protection and the promotion of sustainable development. The research, qualitative in nature and bibliographic in character, is based on a theoretical-interpretative analysis of the main laws, policies, and environmental management instruments, as well as their relationship with governance and sustainability. Authors such as Milaré, Fiorillo, Antunes, Freitas, Barbieri, and Sachs were considered, in addition to international documents such as the Rio Declaration (1992) and the UN 2030 Agenda (2015). The results indicate that, although Brazil has one of the most advanced environmental legislations in the world, challenges persist related to institutional fragmentation, lack of resources, insufficient enforcement, and the influence of economic interests on environmental decisions. It is concluded that the effectiveness of legislation depends on the integration between legal norms, public policies, and collaborative governance mechanisms, supported by social participation, transparency, and technological innovation. Thus, institutional strengthening and the adoption of participatory management strategies are essential to transform environmental law into an effective instrument for ecological protection and the promotion of socio-environmental justice.

Keywords: Environmental legislation; Public policies; Sustainability; Environmental governance; Legal effectiveness.

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INTRODUCTION

The growing degradation of ecosystems and the intensification of climate change have placed the environment at the center of global discussions on development and sustainability. In this context, environmental legislation and public policies emerge as fundamental instruments to guide state and social action in preserving natural resources and promoting a balanced development model. Assessing the impacts of environmental legislation on the effectiveness of public policies thus becomes an essential field of study to understand whether legal and regulatory norms have achieved their objectives and contributed, in fact, to improving environmental and social conditions.

Specialized literature, represented by authors such as Milaré (2020), Fiorillo (2019), and Antunes (2019), highlights that Brazilian Environmental Law has one of the most comprehensive frameworks in the world, consolidated by fundamental milestones such as the 1988 Federal Constitution, Law No. 6,938/1981, which establishes the National Environmental Policy (PNMA), and the New Forest Code (Law No. 12,651/2012). However, despite legal solidity, gaps persist in the implementation and enforcement of these norms, reflecting a distance between legal theory and effective practice. Authors such as Freitas (2020) and Sánchez (2021) emphasize that assessing the effectiveness of environmental legislation means understanding not only the formal compliance with laws but also their concrete impacts on ecosystems, public policies, and society.

The general objective of this study is to analyze the impacts of environmental legislation on the effectiveness of Brazilian public policies, identifying the extent to which existing norms have contributed to environmental protection and sustainable development. Specifically, it seeks to: (a) understand the historical and conceptual evolution of environmental legislation in Brazil; (b) discuss environmental public policies and their management instruments; (c) examine governance and sustainability mechanisms; (d) assess the effects and limitations of environmental legislation; and (e) present future perspectives for improving national environmental policy.

The central hypothesis of this study assumes that Brazilian environmental legislation, although advanced in normative terms, faces difficulties in implementation due to institutional, political, and economic barriers that compromise the uniform application of norms and reduce their positive impact on public policies. It is also assumed that the absence of systematic monitoring, the lack of technical resources, and the lack of integration among federative entities weaken environmental governance and limit the reach of sustainability actions.

The justification for conducting this work stems from the need to understand the factors that influence the effectiveness of environmental policies at a historical moment when ecological challenges are intensifying. The degradation of biomes, the advance of deforestation, urban pollution, and environmental disasters—such as those that occurred in Mariana/MG and Brumadinho/MG—highlight



the urgency of improving legal and administrative mechanisms for control, enforcement, and accountability. Furthermore, the critical analysis of environmental legislation provides a basis for formulating more effective policies and contributes to strengthening democratic and participatory governance.

Methodologically, the study is qualitative and bibliographic in nature, based on a review of specialized literature, legislation, institutional documents, and national and international reports. Reference works in the fields of Environmental Law, public management, and sustainability were consulted, such as those by Barbieri (2017), Jacobi (2003), Bursztyn and Bursztyn (2012), Leff (2001), and Sachs (2008), in addition to official UN documents (1992, 2015) and relevant Brazilian legislation.

The structure of this work is organized into five main sections. The first presents Brazilian environmental legislation from a historical and conceptual perspective, highlighting its normative milestones and fundamental principles. The second discusses environmental public policies, their instruments, and the role of different actors in implementing and evaluating actions. The third addresses environmental governance and sustainability as essential dimensions for consolidating a balanced and participatory development model. The fourth section analyzes the assessment of the impacts of environmental legislation, examining the expected and actual effects of norms and the relationship between legal norms and practical effectiveness. The fifth and final section deals with the challenges, limitations, and future perspectives of applying environmental legislation, reflecting on possible paths for strengthening public policies and ecological governance in Brazil.

Thus, this study seeks to contribute to the academic and political debate on the role of environmental legislation in building a sustainable, transparent, and socially responsible State, in which environmental protection is understood not as an obstacle to development but as an indispensable condition for the continuity of life and social justice.

METHODOLOGY

This research is characterized as a qualitative study, exploratory and descriptive in nature, grounded in bibliographic review and theoretical-interpretative analysis. The choice of this methodology is justified by the need to comprehensively and critically understand the relationships between environmental legislation and the effectiveness of public policies, analyzing not only the normative content of laws but also the political, institutional, and social context in which they are embedded.

The bibliographic review was developed through the analysis of books, scientific articles, legislation, official reports, and national and international institutional documents, encompassing both classical and contemporary authors in the fields of Environmental Law, sustainability, and public policies. Among the main references consulted are Milaré (2020), Antunes (2019), Fiorillo (2019), Freitas (2020),



Barbieri (2017), Bursztyn and Bursztyn (2012), Sánchez (2021), and Jacobi (2003), in addition to legal frameworks such as Law No. 6,938/1981 (National Environmental Policy), Law No. 9,605/1998 (Environmental Crimes Law), and Law No. 12,651/2012 (Forest Code).

The theoretical-interpretative analysis involved consulting norms, resolutions, treaties, and international declarations, such as the Rio Declaration on Environment and Development (1992), the Paris Agreement (2015), and the UN 2030 Agenda (2015), which guide the formulation of environmental policies in the global context. This approach allowed correlating the Brazilian legal framework with international trends in sustainability and environmental governance.

The methodology was structured into complementary stages. First, a theoretical and legal survey was conducted on the evolution of environmental legislation, its principles, and management instruments. Next, an interpretative analysis of environmental public policies and their governance mechanisms was developed, identifying barriers and potentialities. Finally, a critical evaluation of the effectiveness of legislation was carried out, considering indicators such as enforcement, transparency, social participation, and the socio-environmental impact of norms.

The adopted method enabled an interdisciplinary approach, integrating legal, administrative, and ecological aspects essential for understanding the complexity of environmental policy. In this way, the research contributes not only to the academic field but also to the formulation of strategies that improve the application of legislation and strengthen sustainability as a structuring principle of Brazilian public policies.

DEVELOPMENT

ENVIRONMENTAL LEGISLATION: HISTORICAL AND CONCEPTUAL CONTEXT

Brazilian environmental legislation is the result of a long historical process of social, economic, and political transformations, marked by growing awareness of the need to protect the environment and ensure sustainable development. The historical context of environmental protection in Brazil reveals a trajectory that moves from an exploitative and utilitarian view of natural resources to a more integrated and sustainable approach, following the advancement of environmental discussions on the international stage.

During the colonial and imperial periods, Brazilian environmental norms were sparse and primarily aimed at economic exploitation. The first regulatory measures had a patrimonial character and sought to protect the interests of the Crown, such as the Regimento do Pau-Brasil (1605) and the Ordens Filipinas, which punished tree cutting without authorization. There was, therefore, no genuine ecological concern, but rather economic and administrative interests (Machado, 2013). With the advance of industrialization and accelerated urbanization in the 20th century, environmental degradation increased,



and consequently, the debate on the need for specific norms to control pollution and ensure the rational use of natural resources intensified.

From the 1970s onward, influenced by the Stockholm Conference on the Human Environment (1972)—the first major international milestone of modern environmental policy—Brazil began to structure its environmental legislation more solidly. As a reflection of this conference, the Special Secretariat for the Environment (SEMA) was created in 1973, a precursor to the current Ministry of the Environment, responsible for formulating environmental public policies. This period was also marked by the approval of important laws, such as Law No. 6,938/1981, which established the National Environmental Policy (PNMA), setting principles, objectives, and environmental management instruments, as well as creating the National Environmental System (SISNAMA) and the National Environmental Council (CONAMA). This legislation was a watershed moment, introducing concepts of prevention, control, and environmental responsibility (Antunes, 2019).

Another essential milestone occurred with the 1988 Federal Constitution, considered one of the most advanced in the world in environmental matters. Article 225 enshrined the right of all to an ecologically balanced environment, imposing on the government and society the duty to defend and preserve it for present and future generations. The Constitution also established that liability for environmental damage is strict, requiring full reparation of harm (Brazil, 1988). This advance represented the consolidation of the principle of sustainable development, reconciling economic growth with environmental preservation.

In parallel, international legal frameworks greatly influenced the formulation of Brazilian policies. The United Nations Conference on Environment and Development (Rio-92) reaffirmed global commitments and gave rise to important documents, such as Agenda 21 and the Rio Declaration on Environment and Development, which emphasize international cooperation and common but differentiated responsibilities among nations (UN, 1992). Later, treaties such as the Kyoto Protocol (1997) and the Paris Agreement (2015) reinforced the global commitment to reducing greenhouse gas emissions and addressing climate change. At the national level, legislation such as the Environmental Crimes Law (Law No. 9,605/1998) and the New Forest Code (Law No. 12,651/2012) improved mechanisms for control, penalties, and environmental recovery, evidencing the legal and institutional maturation of Brazilian environmental policy (Milaré, 2015).

The fundamental principles of Environmental Law are pillars that guide the interpretation and application of environmental legislation. Among them are the principle of prevention, which seeks to avoid environmental damage before it occurs; the precautionary principle, which recommends adopting protective measures even in the face of scientific uncertainty; the polluter-pays principle, according to which the agent causing environmental degradation must bear the costs of remediation; and the principle



of the socio-environmental function of property, which links land use to collective interest and environmental preservation (Benjamin, 2008; Fiorillo, 2018). There is also the principle of intergenerational solidarity, which emphasizes the need to ensure dignified living conditions for future generations, and the principle of information and participation, which guarantees society the right to participate in the formulation and control of environmental policies.

Therefore, the evolution of environmental legislation in Brazil reflects not only the State's maturation in addressing ecological challenges but also the incorporation of ethical and social values that transcend the legal dimension. It is a dynamic normative field, constantly updated in the face of global technological, climatic, and socioeconomic transformations. The consolidation of environmental law principles and the integration of national and international legal frameworks have been fundamental for strengthening environmental governance and advancing ecological awareness that recognizes the environment as a common heritage of humanity.

ENVIRONMENTAL PUBLIC POLICIES: CONCEPTS AND PURPOSES

Environmental public policies constitute an articulated set of actions, guidelines, and instruments formulated by the State, in partnership with various sectors of society, with the objective of protecting, conserving, and restoring the environment, ensuring the sustainable use of natural resources and the right of present and future generations to an ecologically balanced environment. According to Jacobi (2003), these policies arise from the need to address environmental problems in a systemic and integrated manner, overcoming the fragmented vision that historically characterized governmental actions in the environmental field. Thus, environmental public policies are conceived as strategies of state intervention, based on normative and scientific principles, aimed at regulating human activities and promoting sustainable practices.

The definition and characteristics of these policies are closely related to the notion of sustainable development and the pursuit of harmonization between economic growth, social justice, and environmental preservation. According to Milaré (2015), environmental policy should act as an instrument for the realization of environmental rights guaranteed by the 1988 Federal Constitution, especially in Article 225, which enshrines a balanced environment as a fundamental right. This policy is characterized by its transversal and intersectoral nature, involving multiple dimensions—ecological, economic, social, legal, and cultural—and requiring cooperation among different levels of government and sectors of society. Furthermore, environmental policies have a preventive, participatory, and educational character, grounded in principles such as precaution, responsibility, and the polluter-pays principle (Antunes, 2019).



For these policies to be effective, the use of appropriate implementation and evaluation instruments is indispensable. Law No. 6,938/1981, which established the National Environmental Policy (PNMA), set forth a series of mechanisms that guide environmental management in Brazil, such as environmental licensing, environmental impact assessment (EIA), ecological-economic zoning (ZEE), environmental information systems, pollution control, and the creation of conservation units. These instruments aim to enable the planning, execution, and monitoring of public and private actions, ensuring compatibility between development and environmental protection (Brazil, 1981).

The evaluation of environmental policies, in turn, is an essential element for measuring their effectiveness and correcting distortions. According to Sánchez (2013), strategic environmental assessment (SEA) and continuous monitoring of the impacts of policies and programs allow for the improvement of environmental management, providing technical and scientific support for decision-making. Transparency and social participation are also fundamental instruments of control and democratization of environmental policy, ensuring that collective interests prevail over short-term economic pressures.

Regarding the role of public and private actors, environmental policies result from a complex network of interactions. The State, through its executive, legislative, and judicial branches, has the duty to formulate, regulate, and oversee the implementation of these policies, ensuring compliance with legislation and access to environmental justice (Freitas, 2020). Federative entities—Union, States, and Municipalities—share competencies in environmental management, as provided in Article 23 of the Federal Constitution, which requires federative cooperation and institutional coordination.

On the other hand, the private sector plays an equally relevant role, whether by adapting its production processes to sustainability standards or by adopting socio-environmental responsibility practices. According to Barbieri (2017), the incorporation of the environmental variable into business management has ceased to be merely a legal requirement and has become a competitive and reputational advantage. Private initiatives can contribute with technological innovations, investments in clean energy, and circular economy practices, reinforcing the transition to a sustainable development model.

Civil society, non-governmental organizations, and social movements also occupy a strategic position in the formulation and control of environmental public policies, acting as mediators between the State and the community. For Acselrad (2009), the effectiveness of environmental policies depends on social engagement and the construction of an environmental citizenship culture that recognizes the interdependence between natural systems and social dynamics. Thus, the democratization of environmental policy is not limited to formal consultation but involves expanding popular participation and strengthening environmental governance.



In summary, environmental public policies constitute a dynamic, multidisciplinary, and constantly evolving field. Their primary purpose is to ensure the ecological integrity of the planet, reconciling development and sustainability. The consolidation of these policies requires not only the existence of effective legal and institutional instruments but also the ethical and political commitment of all actors involved—State, companies, and civil society—in defending a common good essential to life: the environment.

ENVIRONMENTAL GOVERNANCE AND SUSTAINABILITY

Environmental governance represents one of the fundamental pillars for the implementation of sustainability policies, constituting a set of mechanisms, processes, and institutions through which the public sector, private sector, and civil society make decisions and implement actions aimed at environmental protection and the rational use of natural resources. According to Lemos and Agrawal (2006), environmental governance goes beyond state control, encompassing a broad network of actors and instruments that collaborate in the formulation, execution, and monitoring of environmental policies. It is, therefore, a management model that values democratic participation, interinstitutional cooperation, and transparency as essential conditions for ensuring sustainability.

Public governance and social participation are inseparable dimensions in this context. The 1988 Federal Constitution enshrined democratic management as a principle of public administration, especially in Article 225, by recognizing the environment as a common good and a shared responsibility between the government and society. Thus, social participation is not only a right but also a civic duty that strengthens social control and the legitimacy of political decisions. According to Jacobi (2003), participatory environmental governance implies a continuous process of dialogue, consensus-building, and mediation of socio-environmental conflicts, enabling citizens to influence decisions that directly impact their communities and ecosystems.

Environmental councils, national environmental conferences, public hearings, and sustainability forums are concrete examples of participatory instruments that integrate public environmental governance. These spaces allow articulation between the State and civil society, promoting pluralism and shared responsibility in the management of natural resources. For Bursztyn and Bursztyn (2012), effective environmental governance depends on institutional arrangements that reconcile divergent interests and ensure transparency of actions, preventing decisions from being captured by specific economic or political groups.

Sustainability, in turn, constitutes the guiding principle of environmental public policies and the central axis of contemporary governance. According to the Brundtland Report (1987), sustainability means meeting present needs without compromising future generations, which requires integrated



policies of an economic, social, and ecological nature. In the governance field, this implies adopting a systemic vision of development, incorporating criteria of equity, efficiency, and ecological prudence.

According to Sachs (2008), sustainability should guide not only environmental policies but the entire structure of public planning, ensuring that ecosystem preservation goes hand in hand with combating social inequalities and promoting environmental citizenship.

Thus, sustainable environmental governance requires long-term strategic planning, socio-environmental performance indicators, and continuous evaluation mechanisms. The State must adopt evidence-based policies, integrating technical and traditional knowledge, while the private sector needs to assume commitments to socio-environmental responsibility, aligning with the Sustainable Development Goals (SDGs) of the UN 2030 Agenda (UN, 2015).

Another essential aspect of environmental governance is transparency, social control, and accountability—concepts that interrelate and ensure the legitimacy and effectiveness of public management. Transparency means public access to information about policies, programs, expenditures, and environmental results, allowing society to monitor government actions. According to Souza Filho and Magalhães (2018), environmental transparency strengthens democratic control, reduces corruption, and increases social trust in institutions.

Social control complements this process, enabling society to oversee and evaluate the performance of public and private bodies in implementing environmental policies. Mechanisms such as transparency portals, ombudsman offices, councils, and open data platforms expand citizen participation and consolidate a culture of collective responsibility. Accountability, according to Pinho and Sacramento (2009), refers to the obligation to provide accounts—not only formally but ethically and participatively—regarding the use of public resources and the results achieved.

Thus, environmental governance and sustainability complement each other as structuring dimensions of a public management model that seeks to balance efficiency, ethics, and equity. The effectiveness of this model depends on consolidating a political culture oriented toward cooperation, transparency, and shared social responsibility. In a global scenario marked by climate crises, environmental degradation, and socioeconomic inequalities, strengthening environmental governance means reaffirming the commitment to a sustainable, democratic, and just future for all.

ASSESSMENT OF THE IMPACTS OF ENVIRONMENTAL LEGISLATION

The assessment of the impacts of environmental legislation is an essential instrument for understanding the effectiveness of norms and policies aimed at environmental protection, allowing measurement of the extent to which legal intentions translate into concrete results in the socio-environmental reality. It is an analytical process that seeks to identify, measure, and interpret the expected



and actual effects of environmental legislation on territory, ecosystems, and human populations, contributing to the continuous improvement of public management and environmental regulation. According to Sánchez (2013), impact assessment is not limited to analyzing specific projects but also encompasses examining the consequences of policies and legal frameworks, providing technical and scientific support for more informed and sustainable decisions.

The methods and indicators for evaluating environmental public policies vary according to the objectives and scope of the analyses. In general, the evaluation seeks to answer three central questions: what was planned, what was implemented, and what results were obtained. According to Arretche (1998), the evaluation of public policies should combine quantitative and qualitative methods to understand both measurable results and institutional and social aspects that influence their implementation. In the environmental field, the most commonly used performance indicators involve the reduction of pollutant emissions, sustainable use of natural resources, recovery of degraded areas, compliance with environmental standards, and the degree of social participation in decision-making processes.

The National Environmental Policy (Law No. 6,938/1981) establishes mechanisms for evaluation and control, such as environmental licensing and environmental impact assessment (EIA), which aim to anticipate, mitigate, and monitor the effects of potentially polluting activities. These instruments allow the State and society to monitor compliance with legislation and verify its effectiveness in protecting natural resources. According to Barbieri (2017), the effectiveness of environmental policies depends not only on the quality of norms but also on the institutional capacity of public agencies to apply, enforce, and adjust them according to socio-economic and ecological changes.

The expected and actual effects of environmental legislation do not always converge. In theory, Brazilian environmental legislation is considered one of the most advanced in the world, especially after the 1988 Federal Constitution, which enshrined an ecologically balanced environment as a fundamental right and a duty of the State and society (Art. 225). However, in practice, many of the objectives set forth in law are not fully achieved. According to Milaré (2015), implementation difficulties stem from factors such as institutional fragmentation, insufficient human and financial resources, overlapping competencies, and lack of integration among federal, state, and municipal levels.

Furthermore, Fiorillo (2019) highlights that the gap between expected effects and actual results is related to the low effectiveness of enforcement policies and the persistence of predatory economic practices that still prioritize profit over environmental conservation. Cases such as illegal deforestation, environmental disasters involving dams, and urban pollution show that the mere existence of legal norms does not guarantee compliance. Hence the importance of continuous monitoring mechanisms and participatory evaluation, involving civil society, universities, non-governmental organizations, and the productive sector in analyzing impacts and proposing improvements.



The relationship between legal norms and practical effectiveness is one of the main challenges of contemporary environmental law. The legal system establishes principles, rules, and sanctions, but its effectiveness depends on external factors such as the administrative capacity of the State, the political commitment of managers, and the level of social awareness. According to Freitas (2020), the effectiveness of environmental norms is conditioned by ecological governance, that is, the integration of law, ethics, and politics in promoting sustainable development. It is not enough to create strict laws; it is necessary to ensure their coherent application, with control mechanisms and democratic participation.

Thus, the assessment of the impacts of environmental legislation should be understood as a permanent process of institutional and social learning. It enables the identification of gaps between norms and reality, adjustment of policies, improvement of management instruments, and strengthening of the credibility of public institutions. According to Cunha and Coelho (2020), transparency and access to reliable environmental data are indispensable conditions for accountability and for building a sustainability culture based on evidence.

CHALLENGES AND LIMITATIONS OF APPLYING ENVIRONMENTAL LEGISLATION

The challenges and limitations of applying environmental legislation in Brazil and worldwide reflect the complexity of balancing economic growth, social justice, and ecological preservation in a context marked by structural inequalities and conflicting interests. Although the country has a robust legal framework—consolidated by the 1988 Federal Constitution, the National Environmental Policy (Law No. 6,938/1981), and a series of complementary norms—the enforcement of these laws faces numerous institutional, political, and economic barriers that hinder their full and continuous application. According to Milaré (2015), Brazil lives with a paradox: it has one of the most advanced environmental legislations in the world but faces some of the greatest difficulties in ensuring its practical implementation and social effectiveness.

Institutional barriers manifest primarily in the fragmentation of environmental management among different levels of government and public agencies. While decentralization of environmental policy is necessary to address regional specificities, it often results in overlapping competencies, communication gaps, and excessive bureaucracy. According to Carvalho (2018), this institutional disarticulation compromises the coherence of actions and reduces the State's capacity to respond to environmental emergencies such as wildfires, deforestation, and water contamination. Added to this are shortages of technical personnel, budgetary limitations of environmental agencies, and the precariousness of enforcement structures, which weaken policy implementation and hinder the accountability of violators.



On the political level, challenges arise largely from the influence of economic interests and the volatility of government agendas. Environmental issues are often treated as secondary during economic crises, when policies favor production and consumption incentives. According to Zhouri and Laschefski (2010), environmental policies face strong pressure from business sectors and agribusiness, which seek to relax licensing norms and reduce restrictions on resource exploitation, evidencing the predominance of a developmentalist rationality over an ecological one. This political instability compromises the continuity of environmental policies and weakens the State's role as mediator of conflicts between economy and nature.

From an economic perspective, the application of environmental legislation faces limitations stemming from the unequal distribution of resources and capacities among federative entities and companies. While large corporations can more easily adapt to environmental requirements, small producers and municipalities with low revenue often lack technical and financial support to comply with the law. Barbieri (2017) highlights that, in many cases, the cost of implementing clean technologies and environmental control systems is still perceived as an obstacle, especially in economies dependent on extractive activities and low value-added production. This asymmetry reinforces inequalities and contributes to maintaining unsustainable patterns of production and consumption.

Another set of challenges relates to enforcement, monitoring, and compliance with environmental norms—fundamental elements for the effectiveness of public policies. Environmental enforcement, carried out by agencies such as IBAMA and state environmental institutes, is constantly hampered by budget cuts, insufficient personnel, and political interference. According to Fiorillo (2019), ineffective enforcement undermines the preventive nature of legislation and fosters impunity, as the perception that the risk of punishment is low leads to the recurrence of illegal practices such as deforestation and industrial pollution.

Environmental monitoring also faces technological and operational obstacles. Although advances in remote sensing systems and public databases have expanded the capacity to track environmental changes, there are still gaps in information integration and transparency of results. Sánchez (2013) emphasizes that monitoring should be understood not only as data collection but as part of a continuous cycle of management and evaluation capable of supporting corrective and preventive policies. However, the lack of continuity in actions and the absence of standardized indicators hinder long-term monitoring and policy comparison.

Finally, conflicts between economic development and environmental preservation constitute perhaps the greatest challenge to the effective application of legislation. Historically, Brazil's development model has been based on intensive exploitation of natural resources as a means of driving economic growth. This paradigm, according to Leff (2001), reflects a productivist and anthropocentric



rationality that views nature merely as an instrument of progress and ignores its ecological limits. This vision results in contradictory policies that seek simultaneously to expand production and protect the environment without achieving a real balance between both goals.

In many regions, especially in the Amazon and Cerrado, there is a coexistence of rigid legal frameworks and predatory economic practices, evidencing the gap between sustainability discourse and territorial reality. Bursztyn and Bursztyn (2012) argue that overcoming this contradiction requires rethinking the very concept of development, incorporating ethical, social, and ecological values to reconcile economic prosperity with environmental integrity.

CONCLUSION

The analysis of the impacts of environmental legislation on the effectiveness of public policies demonstrates that Brazil possesses one of the most advanced legal frameworks in the world in environmental matters, the result of a historical process that consolidated principles such as precaution, prevention, the polluter-pays principle, and intergenerational responsibility. However, it is evident that the mere existence of comprehensive laws has not been sufficient to guarantee their full effectiveness, due to institutional, economic, and political obstacles that compromise the implementation and enforcement of norms.

It was found that, although the National Environmental Policy (Law No. 6,938/1981), the 1988 Federal Constitution, and the Forest Code (Law No. 12,651/2012) have established solid foundations for environmental management, the practical application of these norms still faces significant challenges, such as the lack of integration among federative entities, shortages of human and financial resources, and weaknesses in enforcement mechanisms. As highlighted by Milaré (2020) and Fiorillo (2019), these limitations reduce the effectiveness of policies and undermine the credibility of environmental institutions, creating space for continued ecological degradation and impunity in cases of environmental damage.

Another relevant point identified was the imbalance between sustainability discourse and the practice of economic development. In many sectors, a productivist and anthropocentric vision still prevails, subordinating environmental protection to market interests. This contradiction, according to Leff (2001) and Bursztyn and Bursztyn (2012), reflects the need to rethink the development model adopted, incorporating an ecological rationality that recognizes the planet's limits and promotes socio-environmental justice.

Despite these limitations, important advances have been observed in the field of environmental governance and in the incorporation of instruments for participation and social control. The consolidation of councils, conferences, and mechanisms for public transparency contributes to democratizing



environmental management and expanding citizen oversight of State decisions. Furthermore, the growing use of technological innovations and intelligent monitoring systems, such as those developed by INPE and MapBiomas, has enhanced enforcement capacity and provided valuable support for evidence-based policies.

Given this scenario, it is concluded that the effectiveness of environmental legislation depends less on creating new norms and more on institutional strengthening, federative cooperation, and the consolidation of a culture of sustainability and environmental citizenship. Improving legislation must be accompanied by integrated public policies, collaborative governance mechanisms, and incentives for socio-environmental responsibility in the private sector.

In summary, the challenge lies not only in refining the legal text but in transforming it into an instrument of concrete change, capable of ensuring the preservation of ecosystems, social justice, and the right of future generations to a balanced environment. Only through the integration of the State, society, and private initiative will it be possible to transform the existing extensive legal framework into an effective system of environmental protection, ensuring that sustainable development becomes a reality and not merely a principle.



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