CAPÍTULO 3 Environmental Federalism in Brazil and the economic analysis of law

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1 Introduction

Brazil embraces the federative form of state organization, which is composed of the national, state, and local governments, and the Federal District (FD). All federative entities are endowed with autonomy and have constitutionally established powers that may be exclusive to a certain entity or shared among them. According to Articles 23 and 24 of the Brazilian Constitution of 1988, the environment is a shared subject, and federative entities must maintain a dialogue to guarantee the right to an ecologically balanced environment. The set of systematized norms in environmental matters formed by the laws of all federative levels is called environmental or "green" federalism.

The purpose of 1988's constituent legislator was to share the duty of the environmental safeguard among all federative levels. However, the Brazilian reality reveals isolation of the entities, resulting in unsystematic environmental legislation. This circumstance contributes to environmental degradation and makes repairing damage more profitable than preventing it, allowing the economic logic to override the constitutionally established law. Given this scenario, this study aimed to analyze the impact of the Brazilian unsystematic environmental federalism in protecting the right to an ecologically balanced environment based on the economic analysis of law, which is committed to economic efficiency.

As a research problem, the following question was proposed: does the Brazilian unsystematic environmental legislation allow economic logic to prevail over the right to an ecologically balanced environment? As a hypothesis, the lack of coordination and cooperation between the federative entities stands out, allowing the economic logic to take advantage of the shortcomings of Brazilian environmental federalism, eroding environmental protection. The deductive method was adopted from the methodological standpoint, starting from fundamental considerations of the economic analysis of law and then applying it to Brazilian environmental federalism.

Firstly, this study highlights the fundamental principles of economic analysis of law, followed by shedding light on environmental federalism in Brazil regarding its jurisdiction and environmental laws. Lastly, it analyzes how economic logic in environmental federalism violates socio-environmental justice.

2 The fundamentals of economic analysis of law

The economic analysis of law is a theory that emerged in the context of utilitarianism, a moral and political philosophy that dominated the 1960s and competition law. This theory eventually came to be applied to all areas of law, leaving the unshared domains of antitrust law and economic regulation (POSNER, 1975, p. 758).

Richard Posner was one of the most prominent advocates of law and economics, mainly after publishing the article *Economic Analysis of Law* in 1973 by the influences of Coase

(1960),¹ Becker (1962),² and Calabresi (1961).³ The major proportion of the movement reflected the emergence of several schools dedicated to studying law and economics, especially the University of Chicago (PARREIRA; BENACCHIO, 2012, p. 184-185).

Furthermore, the economic analysis of law is pillared on microeconomics, which is an economic field responsible for describing how the production system works rationally (GONÇALVES; STELZER, 2012, p. 85). It was the result of the attempt disseminated by economists to promote specifically economic mechanisms and interpretations in the legal field, to which the methods, in structure and application, of economics were applied (BENSOUSSAN; GOUVÊA, 2015, p. 165).

Posner believed that human beings are in constant pursuit of rational maximization of goods and human satisfaction, putting their personal interests above all else (POSNER, 1975, p. 761). Thus, economic logic uses the concepts and methods applied to economics to understand and solve legal disputes while always striving for efficiency (POSNER, 1975, p. 762); hence, theoretically, the economic analysis of law would be able to fix oversights and gaps in law (POSNER, 1981, p. 75).

The idea of efficiency being the only value that a system could fully promote and the possibility of law as a way of

¹ COASE, Ronald Harry. The problem of social cost. *Journal of Law and Economics*, v. 3, p. 1-44, 1960.

² BECKER, Gary S. Irrational Behavior and Economic Theory. *Journal of Political Economy*, v. 70, n. 1, fev., 1962.

³ CALABRESI, Guido. Some thoughts on risk distribution and the law of torts. The Yale Law Journal, v. 70, n. 4, 1961.

maximizing goods is why economists are supposed to study the legal system (POSNER, 1979, p. 292). While it is necessary to study and understand production costs for law and economic supporters, economists play an essential role in eventual events of legal reforms (POSNER, 1979, p. 287).

Economists would be better at performing modern quantitative analysis methods than lawyers, more resourceful at discovering and using statistics in the legal system, and more sensible to the qualitative problems acquired from such data (POSNER, 1975, p. 766). Hence, economists would be vital in law schools because the education of future lawyers would be incomplete without economic principles (POSNER, 1975, p. 779).

According to the economic logic, the basal idea of cost benefit is widespread, which corresponds to a consequentialist analysis since it surrounds the potential outcomes of a given decision and changes it based on purely economic criteria (DIÓS, 2011, p. 116-118). Such a decision is not necessarily the fairest but the most economically efficient and profitable. The analyses result from the Coase theorem, which presupposes the resolution of disputes based on the least economically damaging decision for the given case (DIÓS, 2011, p. 118).

The theory defended by economists is that efficiency is an adequate tool for the conception of justice (POSNER, 1981, p. 7), which is understood as an ethical-scientific concept that corresponds to the human pursuit of satisfying desires and expectations (POSNER, 1981, p. 13). Those committed to the economic analysis of law also argue that there are several conducts classified as unfair despite being efficient, and,

therefore, society must be willing to "pay a price" to reduce certain rights and make the theory of justice useful (POSNER, 1975, p. 778).

Applying the formula of social welfare concerning law and economics can also be noted, as utilitarianism is guided by the movement (ALVAREZ, 2006, p. 54). The main criticism of the joint of economics and law lies on a legal and philosophical basis: the commitment of economic analysis of law is not to justice but economic efficiency. The law and economics answer is founded on the supposed superiority of economists in the face of jurists: in distributive issues, economists would have greater expertise than those who philosophically address the standard problems of distributive justice (POSNER, 1975, p. 777).

Moreover, in some contexts, the justice defended by law would simply be the efficiency defended by law and economics because an unfair decision could be seen as a waste of resources (POSNER, 1975, p. 777). Nevertheless, the utilitarian vision of the movement is rather non-compliant to human rights since it holds economic efficiency at the same ethical and scientific level, quantifying and undermining law (PARREIRA; BENACCHIO, 2012, p. 189).

Advocates of the economic analysis of law reply to critics by stating that it is necessary to rationally analyze the economic outcomes in society (POSNER, 1975, p. 778), even stating that the economic analysis of law is essential for the development of society and lifting the economy to a higher level than legal constructions (POSNER, 1981). Lastly, these individuals believe

that a theory cannot be invalidated merely by pointing out its flaws and limitations, and a more inclusive, powerful, and useful theory must be presented to replace it (POSNER, 1975, p. 774).

Although economic principles are different from juridical ones, economic impacts on law decisions cannot be neglected. Laws must enable solutions that seek justice and include the economic dimension, albeit without redeeming it for logical efficiency that is not committed to justice. For this matter, it is necessary to analyze whether Brazilian environmental federalism manages to make socio-environmental justice or if it gives space to applying an exclusive economic logic.

3 Environmental federalism in Brazil

Federalism is measured by the congregation of independent and supreme states, which means that the state organization is divided into federative spheres, and these spheres own exclusive jurisdictions, yet they assemble given certain reasons. The federative state is a concept practiced by each country given a constitutional order (SARLET; MARINONI; MITIDIERO, 2019, p. 1155).

Brazilian federalism has its basis in the 1988 Brazilian Constitution, which established the assigned dictations and competencies given to the respective federal entities. The national, state, local, and FD governments compose the pointed being and are also part of the organization that belongs to the Brazilian State. The autonomy of the federative spheres set by Articles 1º and 18 of the Brazilian

Constitution connotes to the constitutional system the need for a cooperative and federalist model engaged by a democratic-participative approach (SARLET; FENSTERSEIFER, 2013a, p. 2).

In order to determine the Brazilian Federalism as cooperative, it means that its beings can prosecute competencies together and act coordinately (PADILHA, 2020, p. 526). Following the hierarchical order of the legislative competencies all federal entities act in both legislative and administrative domains presented in several matters, including the environmental set (SARLET; FENSTERSEIFER, 2013a, p. 3). These competencies can still be exclusive or shared between its beings. The environment, for instance, is a shared theme between the entities, meaning that the national, states, local, and FD governments can act on environmental matters.

The present-day relationship between human beings and the environment started to be defined by the power provided by the advancement of several technologies and social complexity, which is why it is marked by strains. On the one hand, the human desire for development and progress has boosted the unrestrained exploration of natural resources, and on the other hand, the consequences of this exploration have put lives at risk, human lives included. In this same subject, the law takes on the fundamental role of enabling the protection of natural resources, establishing norms and principles that aim to protect the present and future generation's quality of life, making it compatible with protecting natural resources and society's evolution (OLIVEIRA, 2012, p. 44-45).

As an acknowledgment of this vision, the 1988 Brazilian Constitution elevated the ecologically balanced environment to the level of fundamental law (Article 225), including the environmental protection between the institutional functions of the Public Prosecutor's Office (Article 129, Subsection III) and including it as a citizen suit (Article 5, Subsection LXXIII), which has also shared the competency of negotiating about the natural resources between all federal entities (Article 23, Subsections VI and VII; Article 24, Subsections VI and VIII).

The premise of environmental legislation is mainly established in Article 225 caput of the Constitution; it is considered the main point of the environmental theme and states that: "All have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations" (BRASIL, 1988). The pointed law consists of a general clause of environmental protection that unfolds in several environmental rights that compose the role of fundamental rights and, therefore, are entrenched clauses in the Constitution. It is up to the State to safeguard Article 225's general clause and its unfolding that permeates the entire constitutional context.

The set of norms, principles, and environmental legislative devices formed by the federative entity's participation was classified as environmental federalism. The Brazilian

^{4 &}quot;Todos têm direito ao meio ambiente ecologicamente equilibrado, bem de uso comum do povo e essencial à sadia qualidade de vida, impondo-se ao Poder Público e à coletividade o dever de defendê-lo e preservá-lo para as presentes e futuras gerações" (BRASIL, 1988).

"green" federalism aims at the cooperation between the federal bodies. Moreover, the 1988 Constitution asserts the environment protection and battle against pollution as common competencies that belong to the federal, state, local, and FD governments (Article 23, Subsection VI), fitting to the complementary laws to fix norms that aim at the cooperation between the federal bodies to obtain the balance of both development and national well-being (Article 23, single paragraph).

Still following the 1988 Constitution, the federal, state and FD governments have the competent jurisdiction to legislate concurrently on themes related to the environment. This is better exemplified in Article 24, Subsections VI (forests, hunting, fishing, fauna, nature conservation, land defense, natural resources, environment protection, and pollution control) and VIII (environment damage responsibility to the consumer, goods, and rights of artistic, esthetic, historical, touristic, and landscape value) (BRASIL, 1988). Being a concurrent legislation, the federal government's competent jurisdiction is limited to establishing general norms, while the supplementary competence is bound to the state government (Article 24, Clauses 1 and 2). If the federal law does not elaborate general laws, the states will exert their full legislative competency to cover the gaps, and so the supervenience of the federal law over general norms will suspend the State's law efficiency on whatever is opposed (Article 24, Clauses 3 and 4). Although the local governments are not expressly cited in Article 24, they participate in the concurrent legislative competency in terms of the environment by their competence to legislate on matters of local interests and supply the federal and state

legislation in what is fitful (Article 30, Subsections I and II; BRASIL, 1988).

Furthermore, Article 23 of Complementary Law n. 140 (December 8th, 2011) has brought a non-exhaustive role of cooperative instruments so that the federal entities act over the infra-constitutional scope, reassuring the state's socioenvironmental law drawn by the 1988 Constitution (SARLET; FENSTERSEIFER, 2013b, p. 7). The Complementary Law has pinned the norms in benefit of the cooperation between the federal, state, local, and FD governments over the administrative actions due to the common competencies exercises related to protecting notable and natural landscapes, environmental protection, against all means of pollution and preservation regarding forests, fauna, flora, among others (BRASIL, 2011).

Additionally, Complementary Law n. 140 shapes, along with the 1988 Constitution, one of the federal government's environmental pillars; this law was created grounded on cooperative and decentralized federalism aimed at respecting the autonomy of all beings (SARLET; FENSTERSEIFER, 2013b, p. 9). It also established a coordinated system of governmental bodies with support from the National Environmental System (Sisnama) (SARLET; FENSTERSEIFER, 2013b, p. 10).

The Brazilian National Environmental Policy (PNMA) was created by Law n. 6.938 (August 31st, 1981), in which its formulation, application goals, and mechanisms were established (BRASIL, 1981). The PNMA "aims to preserve, improve, and recover environmental wealth that provides life, to reassure,

in the country, socio-economic development conditions regarding national security interests and human dignity" (Article 1, BRASIL, 1981). The aforementioned law also established the structure of Sisnama, which is still found by the entities and organs that belong to the federal, state, local, and FD governments, in addition to the territories and counties, and foundations instituted by the federal government, which is responsible for the wealth and protection of the quality of the environment (Article 6; BRASIL, 1981). The referred system starts from the assumption that the environmental actions must elucidate the ecologic preservation, thus, coordinating and issuing general norms and principles and administratively managing the country's natural resources by distributing them to the organs' and environmental institutions' (SANTANA; LEUZINGER; SILVA, 2019, p. 281-282).

Although the creation of PNMA and Sisnama sparked the match for environmental preservation, the lack of dialogue and coordination between its federal entities and respective environmental organs harms the established system's efficiency. What is noticed is that the institutions work in a disarticulate way; therefore, the homogeneity in the fight for preserving the environment (SANTANA; LEUZINGER; SILVA, 2019, p. 283).

Such prerogatives reinforce the substantial need for the environment's preservation provided by the State, and still ground the environmental principles, organs, and systems

^{5 &}quot;Tem por objetivo a preservação, melhoria e recuperação da qualidade ambiental propícia à vida, visando assegurar, no País, condições ao desenvolvimento socioeconômico, aos interesses da segurança nacional e à proteção da dignidade da vida humana" (Article 1; BRASIL, 1981).

created and tutored over the years. Nonetheless, the persistent degradation of natural resources, environmental crimes, and ecological negligence point to contradictions over the constitutional devices that cherish effective environmental protection. In practice, it is possible to observe that environmental degradation seems to "compensate" in the country.

The environmental matters taken into consideration in the Supreme Court show that granted principles (e.g., the polluter-pays and precautionary principles) indicate that the burden of proof is shifting from the meaning of demonstrating that the damages are acceptable over the trade-off of such benefits and expenses, or therefore, the choice of the most profitable option over the other (SAMPAIO; REZENDE, 2020, p. 278-279). This is possible for the simple reason that Brazilian environmental federalism consists of a complex and unorganized structure that distributes the competencies with no rigorous selectivity (CANOTILHO; LEITE, 2007, p. 205).

The non-determination of the competence that checks over those matters and disarrangement over each federal role, allied to the lack of dialogue between the entities, raises obstacles to forming the environment's protective structure and opens a path for those that wish to cheat normatively. Its meanings make it possible for natural resources to be explored effortlessly without concern for repercussions. Considering the economic efficiency, the low-risk matters reward lawbreakers, and still, the legislation cannot stop the environmental degradation.

Therefore, it appears the non-systematization of the legislative power and the isolation of the federative beings culminate in weakening the environmental rights of Brazilian environmental federalism. The federative "gap" favors the impossibility of punishment and environmental degradation, pushing Brazil away from its Socio-environmental Rule of Law. In this same context, what can be secured in Brazil is the wide use of the economic analyses of law in environmental matters.

4 "Green" federalism rescued as the requirement of the Socio-environmental Rule of Law

The Socio-environmental Rule of Law is a legal-constitutional mark that has its origin in the Democratic Rule of Law professed by the 1988 Constitution. What is more, the Socio-environmental Rule of Law came from the need of having a link between the social and ecologic dimensions, such as human dignity, because the legal-political project foreseen in the legal ornament could be reputable and compatible, in which the social and ecologic integration is substantial (FENSTERSEIFER, 2008, p. 133-134), in addition to, the cooperation between federal entities and demand of a truly participative democracy in the ecologic field (SARLET; FENSTERFEIFER, 2014, p. 4).

The historicity made that the Rule of Law would modify itself until it evolved into the Democratic and the Constitutional Rule of Law, (i.e., Socio-environmental Rule of Law), which is expressed over the environmental rights for its ecological protection as fundamental law's prism. Thus, environmental

protection, which is considered one of the State's primary concerns, is related to a dignified and healthy life for all populations. Therefore, the State must supervise all historical evolution and face the environmental threats that perpetuate nowadays (FENSTERSEIFER, 2008, p. 135).

The contemporary environmental emergency regarding natural and human-caused disasters inflicted on the environment is a matter of ecologically balanced concern, making it up to the State to monitor the evolution of society and overcome its environmental challenges and threats (FENSTERSEIFER, 2008, p. 135). The right over the ecologically balanced environment must integrate the precepts of any Constitution that effectively wishes to protect a community and, therefore, the Rule of Law must submit itself to the Ecological and Socioenvironmental and Constitutional Rule of Law to ensure the effectiveness of all constitutional contexts (CANOTILHO, 2010, p. 7-10). There are no constitutional gaps regarding the logical economic application to the law to allow a cost-benefit relationship with the environment.

The legal conceptions brought by the economic analysis of law are in charge of shallow exaltations involving a moral theory that is incomprehensible or unreasonable by its supporters (DWORKIN, 2006, p. 75). The critics of economic analysis of law assert that it would be innocuous for not distinguishing the social sciences particularities and their impact on society, heating up the social justice (DWORKIN, 2006, p. 76). Unlike economics, the law must be guided by its integrity and composed of justice, equity, and accompanied

by a legal process, therefore not succumbing to the appeal of economic efficiency.

The unmethodical legislative perversion of environmental protection is a theme that does not regard the State from the point of view of protecting fundamental rights and justice. The profit earned by companies through any environmental crime or when ruled over a purely economic analysis is converted into tax revenue, meaning the maximization of wealthy.

The use of economic analysis of law is broadly observed in the authorization of trawling (ESTEVES, 2021). Conceived by a Supreme Court judge, the injunction puts biodiversity, marine life, and ecosystems at risk, and promotes species extinction, a constitutionally forbidden act (Article 225, Clause 1; BRASIL, 1988), all in order to achieve profits. The illegal deforestation and criminal forest burnings in Brazil also point to the State's indifference in protecting the environment.

In this sense, the logical-economic decisions, regarding the economic analysis of law, are considered efficient because they produce profits, despite creating dysfunctionalities in the law system, that loses its function (PIETROPAOLO, 2010, p. 173). Allowing the deflation of environmental rights by economic arguments would mean receding what is forbidden (SARLET; FENSTERSEIFER, 2019). It is necessary to maintain the degree of environmental protection established by the 1988 Constitution, given that environmental rights and other fundamental rights are measured by their historicity, that

is, their acclaim in the Constitution is an achievement that results from socioenvironmental clashes (ASSIS, 2021).

Considering the economic aspects over legal decisions is acceptable and vital because of the complex current consumption relation, although it must not open a gap so that the economy dictates what is or what is not justice. In fact, it is not an economic science object to study the rights as justice, and justice cannot be excluded from the legal system, if so, the law tends to even lose its essence and purpose. Finally, the law does not need a "price tag", as well as justice cannot possess the meaning of the word efficiency, in contrary to what economists, especially Richard Posner, have proposed (POSNER, 1975, p. 777).

The simple constitutional protection of environmental rights does not assure green constitutionalism. The federative entities must dialogue with each other to accomplish their constitutional competencies, departing the cost-benefit relationship over the environmental theme because it is incompatible with the 1988 Brazilian Constitution. Opening breaches in environmental protection based on economic efficiency implies opening cracks in constitutionally protected rights and, therefore, in the Constitution itself and Socioenvironmental Rule of Law affirmed therein.

5 Conclusions

Brazilian federalism is composed of competencies shared among federal entities and infra-constitutional regulation, although, in practice, the set of normative environmental laws is unsystematic due to the lack of dialogue between the entities. This federal isolation allows the application of cost-benefit to environmental damage, thereby defeating environmental protection.

The 1988 Constitution clearly established environmental rights. Therefore, environmental protection implemented mostly by infra-constitutional legislation cannot undermine the fundamental constitutional status of the right to an ecologically balanced environment. There is no compatibility between economic logic and social-environmental justice established by the Constitution. The economic dimension of state decisions cannot be ignored, but the commitment of law is – and must always be – with justice and not with strictly economic efficiency.

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