



NEW PESTICIDE LAW AND ABUSIVE ENVIRONMENTAL CONSTITUTIONALISM IN BRAZIL: FROM SOCIO-ENVIRONMENTAL REGRESSION TO AN ECOLOGICAL CONSTITUTIONALISM

NOVA LEI DE AGROTÓXICOS E O CONSTITUCIONALISMO AMBIENTAL ABUSIVO NO BRASIL: DO RETROCESSO SOCIOAMBIENTAL AO CONSTITUCIONALISMO ECOLÓGICO

NUEVA LEY DE AGROTÓXICOS Y EL CONSTITUCIONALISMO AMBIENTAL ABUSIVO EN BRASIL: DEL RETROCESO SOCIOAMBIENTAL AL CONSTITUCIONALISMO ECOLÓGICO

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ABSTRACT

The article critically analyzes Law No. 14,785/2023 (the new Pesticides Law) in light of the 1988 Constitution and the paradigm of ecological constitutionalism. It starts from the hypothesis that the law promotes a socio-environmental setback, made possible through what we call abusive environmental constitutionalism, which consists of the instrumentalization of constitutional legality to chronically violate the state's duty of environmental protection. The main objective of the research is to demonstrate that by breaking with the tripartite model and concentrating regulatory powers over pesticides in the Ministry of Agriculture and Livestock, the new law violates fundamental constitutional principles such as precaution, prevention, and prohibition of socio-environmental regression. The methodology adopts a qualitative approach, based on documentary analysis and bibliographic review. In conclusion, it is found that the new legislation consolidates a

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model of governance that constitutes a socio-environmental setback, in which the state acts as an agent of legitimization of the interests of agribusiness. In response, ecological constitutionalism is proposed as a path for normative, hermeneutic, institutional, and political-social reconstruction, based on the interdependence between the protection of nature and fundamental rights.

Keywords: Pesticides Law. Abusive Environmental Constitutionalism. Socio-environmental Regression. Ecological Constitutionalism.

RESUMO

O artigo analisa criticamente a Lei nº 14.785/2023 (nova Lei de Agrotóxicos) à luz da Constituição de 1988 e do paradigma do constitucionalismo ecológico. Parte-se da hipótese de que a referida lei promove um retrocesso socioambiental, viabilizado através do que chamamos de constitucionalismo ambiental abusivo, que consiste na instrumentalização da legalidade constitucional para violar cronicamente o dever estatal de proteção ambiental. A pesquisa tem como objetivo central demonstrar que ao romper com o modelo tripartite e concentrar competências regulatórias dos agrotóxicos no Ministério da Agricultura e Pecuária, a nova lei viola princípios constitucionais fundamentais como a precaução, prevenção e vedação ao retrocesso socioambiental. A metodologia adota abordagem qualitativa, com base em análise documental e revisão bibliográfica. Ao final, conclui-se que a nova legislação consolida um modelo de governança que configura um retrocesso socioambiental, no qual o Estado atua como agente de legitimação dos interesses da agroindústria. Como resposta, propõe-se o constitucionalismo ecológico como caminho de reconstrução normativa, hermenêutica, institucional e político-social, fundado na interdependência entre a proteção da natureza e os direitos fundamentais.

Palavras-chave: Lei de Agrotóxicos. Constitucionalismo Ambiental Abusivo. Retrocesso Socioambiental. Constitucionalismo Ecológico.

RESUMEN

El artículo analiza críticamente la Ley n.º 14.785/2023 (nueva Ley de Agrotóxicos) a la luz de la Constitución de 1988 y del paradigma del constitucionalismo ecológico. Se parte de la hipótesis de que dicha ley promueve un retroceso socioambiental, posibilitado a través de lo que denominamos constitucionalismo ambiental abusivo, que consiste en la instrumentalización de la legalidad constitucional para violar crónicamente el deber estatal de protección ambiental. El objetivo central de la investigación es demostrar que, al romper con el modelo tripartito y concentrar las competencias reguladoras de los plaguicidas en el Ministerio de Agricultura y Ganadería, la nueva ley viola principios constitucionales fundamentales como la precaución, la prevención y la prohibición del retroceso socioambiental. La metodología adopta un enfoque cualitativo, basado en el análisis documental y la revisión bibliográfica. Al final, se concluye que la nueva legislación consolida un modelo de gobernanza que configura un retroceso socioambiental, en el que el Estado actúa como agente de legitimación de los intereses de la agroindustria. Como respuesta, se propone el constitucionalismo ecológico como vía de reconstrucción normativa, hermenéutica, institucional y político-social, basada en la interdependencia entre la protección de la naturaleza y los derechos fundamentales.

Palabras clave: Ley de Agrotóxicos. Constitucionalismo Ambiental Abusivo. Retroceso Socioambiental. Constitucionalismo Ecológico

INTRODUCTION

Since the 1960s, with the publication of the book *Silent Spring* by biologist Rachel Carson in 1962, concern about the harmful effects of pesticides gained more concrete contours. However, even with Carson's warnings about the risks and dangers of these products to the environment and the advancement of national and international environmental protection laws, the use of chemical inputs in agriculture has only increased in recent decades. This process is part of the so-called "evolution" of the agricultural sector, which since the mid-20th century has incorporated more and more biochemical technology into its production process.

In this context of technological advancement in agro-industrial production, Brazil historically established itself as one of the largest consumers of pesticides in the world, mainly due to the expansion of the intensive agriculture model focused on commodity exports over the last 50 years (Terra, 2008). This process gained even more strength in the 1970s, when the crisis of the Import Substitution Industrialization economic model shifted the focus of Brazil's macroeconomic policy from industry to export agriculture (Morceiro, 2012).

As a result, the so-called "Green Revolution"², occurred, which was the process of agricultural modernization driven by policies that prioritized large-scale agricultural productivity and stimulated the use of agrochemical inputs, such as the National Agricultural Defensive Program (PNDA) of 1975.³ Since then, the national agricultural sector has grown and exponentially increased its productivity, with this growth becoming increasingly dependent on chemical substances, many of which are already banned in other countries due to their high-risk toxicological profile for the environment and human health.

Year after year, Brazil increasingly isolates itself at the top of the ranking as the world's largest consumer of pesticides. According to data from the United Nations Food and Agriculture Organization (FAO)⁴, Brazil used 800 million kg of pesticides in 2022. The United States, which occupies second place in the world ranking, used 467 million, a percentage 41.6% less than Brazil; while Indonesia, third in the world ranking, used 294 million kg, a percentage 63.2% less than Brazil (FAOSTAT, 2024).

² The term was adopted during the Cold War to indicate the possibility of revolutionizing humanity's living conditions, overcoming the problem of hunger through the intensive use of chemicals and technology in agriculture. The allusion to "green" had, therefore, a double connotation: the first, more obvious, was related to agriculture; the second alluded to an alternative to the Red (socialist) Revolution as a solution to ending misery. (Bombardi, 2023, p. 44).

³ On the context of the PNDA and its relationship with the Brazilian military dictatorship, see: Lignani; Brandão (2022).

⁴ FAOSTAT. **Production – FAOSTAT**. Available at: <https://www.fao.org/faostat/en/#data/RP/visualize>. Accessed on: 14 Aug. 2025.

When placed in historical perspective, the pesticide consumption numbers in Brazil are even more alarming and show the abrupt escalation in the use of these substances. In 2002, the country used 146 million kg of pesticides in its territory. This represents an 81.75% increase in annual pesticide consumption in the country over the last 20 years (Faostat, 2024).⁵ This implies that in 2022, Brazil consumed about 4kg of pesticides per inhabitant, considering the 203 million inhabitants recorded by the IBGE⁶ 2022 Census.

In this scenario of exponential increase in pesticide use in Brazilian territory, the legal frameworks regulating the registration, commercialization, and inspection of these substances play a fundamental role in ensuring that the State fulfills its constitutional duty to protect against the negative externalities associated with these products. This guarantees the people the effectiveness of the fundamental rights to health, life, human dignity, and an ecologically balanced environment, as provided for in the 1988 Constitution.

Since 1989, pesticide regulation was governed by Law No. 7,802/89, which was only regulated in 2002 by Decree No. 4,074/02. Together, these norms regulated the control of registrations, re-evaluations, inspection, use, and commercialization of pesticides in Brazil based on a tripartite model, with equal participation from federal environmental, health, and agriculture agencies. This was to ensure that environmental, human health, and agricultural efficiency aspects were considered in the regulatory decision-making process for pesticides.

However, this tripartite regulatory system was recently superseded by the enactment of Law No. 14,785/23, the new pesticide law, which governs the use, registration, production, commercialization, packaging, and inaugurates the new legal framework for pesticides in Brazil. The new law derives from a bill that had been moving through the national congress for over twenty years and was nicknamed the "Poison Bill" due to its more permissive and flexible nature regarding pesticides, under the justification of the need to modernize national regulatory parameters on the matter.⁷

The new law was sanctioned by the President of the Republic with 17 veto messages, focusing on provisions that broke with the tripartite model and gave the federal agriculture agency a leading role in the pesticide regulatory process, especially in registrations, post-registration changes,

⁵ FAOSTAT. **Production – FAOSTAT**. Available at: <https://www.fao.org/faostat/en/#data/RP/visualize>. Accessed on: 14 Aug. 2025.

⁶ IBGE. **2022 Census Overview**. Available at: <https://censo2022.ibge.gov.br/panorama/>. Accessed on: 14 Aug. 2025.

⁷ The project is presented by the ruralist sector as a modernization, a flexibilization, and a debureaucratization of an "outdated" law that impedes the sector's growth. However, the benefits of the project for civil society are hardly apparent, since the "flexibilization" would lead to an even less environmentally and socially responsible use of pesticides in a country that already holds the record for pesticide consumption. (Leonel Jr.; Helmold, 2018, p. 2009).

and risk reanalysis. Of the 17 vetoes imposed by the President, 14 were overturned by Congress⁸, which allowed the maintenance of the more permissive and flexible profile of the new norm, with the centralization of powers in the federal agriculture agency.

Now, in November 2025, almost two years after the new pesticide law came into force, many doubts and uncertainties remain regarding the regulation of the matter at the national level, which has been left in a kind of "regulatory limbo." This is because, although pesticide regulation is an extremely complex process, a specific regulatory decree detailing the general guidelines of Law No. 14,785/23 has not yet been issued. As a result, provisions of Decree No. 4,074/02 that are incompatible with the new law remain in force, creating gaps and legal uncertainty in the regulatory governance of pesticides in Brazil.

Given this conflictual context surrounding⁹ the new pesticide law in Brazil, this article seeks to investigate the socio-environmental setbacks promoted by Law No. 14,785/23 and understand the main problems of the current governance model proposed by the new legislation. The scope, therefore, is to analyze the change in the normative paradigm in order to identify unconstitutional aspects and the most sensitive points of the new law, with the general objective of investigating how this new legal framework impacts fundamental rights and the possible solutions that a perspective of ecological constitutionalism can offer to the problem of the abusive use of pesticides in Brazil.

To achieve this aim, we will examine in greater depth the innovations brought by Law No. 14,785/23 to the institutes of registration and risk reanalysis, with the intention of identifying the most sensitive points and unconstitutional aspects in the normative reconfiguration promoted in these institutes. Then, we will address the new general pesticide law from the perspective of abusive environmental constitutionalism (Landau, 2020), to understand how the abuse of pesticides contributes to socio-environmental regression and violates fundamental rights provided for in the 1988 Constitution. Finally, we will investigate how ecological constitutionalism can offer us tools to think about solutions to the pesticide problem (Iacovino, 2020).

To achieve the objectives, the research adopts a qualitative and descriptive-analytical methodological approach, based on a literature review and document analysis. In procedural terms, the research conducted a literature review on its two structuring themes: a) pesticide law; and b) ecological constitutionalism. Documental and normative analysis appears transversally in the article,

⁸ National Congress. **Veto No. 47/2023** (Flexibilization of pesticide registration). Available at: <https://www.congressonacional.leg.br/materias/vetos/-/veto/detalhe/16209>. Accessed on: 14 Aug. 2025.

⁹ The project is presented by the ruralist sector as a modernization, a flexibilization, and a debureaucratization of an "outdated" law that impedes the sector's growth. However, the benefits of the project for civil society are hardly apparent, since the "flexibilization" would lead to an even less environmentally and socially responsible use of pesticides in a country that already holds the record for pesticide consumption. (Leonel Jr.; Helmold, 2018, p. 2009).

using legislations and pesticide databases as primary sources. Finally, the socio-constitutional analysis of pesticides in Brazil from the perspective of ecological constitutionalism.¹⁰ will serve as the basis for constructing the article's central hypothesis: that the abuse of pesticides chronically and structurally violates fundamental rights.

The article is structured into three interdependent sections, which seek to articulate the legal-regulatory debate with constitutional and socio-environmental analysis regarding the new pesticide law in Brazil. The first section, titled "Law No. 14,785/23 and the End of the Tripartite Model," examines the main problems of the new regulatory framework that culminated in the end of the tripartite regulatory model. The second section, titled "The New Pesticide Law and Abusive Environmental Constitutionalism," investigates how the mechanisms of environmental constitutionalism were instrumentalized to promote socio-environmental regression. Finally, the third section, titled "Alternatives from Ecological Constitutionalism," is dedicated to investigating the potential of ecological constitutionalism for promoting state duties of socio-environmental protection.

1 LAW NO. 14,785/23 AND THE END OF THE TRIPARTITE MODEL: A CRITICAL ANALYSIS OF THE REGULATORY FLEXIBILIZATION OF PESTICIDES IN BRAZIL

The problems concerning the issue of pesticides in Brazil are numerous. Due to its world-record consumption of pesticides, the country has accumulated empirical evidence of the negative impacts of these substances on human health and the environment.¹¹ However, in this section, we do not intend to address these impacts empirically, but rather to expose some of the most sensitive points of the new regulatory framework for pesticides, which introduces unconstitutional aspects and legal uncertainty regarding the regulation of the matter.

¹⁰ The review was conducted in the Scielo database and the Capes Journal Portal, with articles selected based on impact criteria.

¹¹ Of the ten best-selling pesticides in the country, five are banned in Europe: mancozeb, atrazine, acephate, chlorothalonil, and chlorpyrifos. Among other effects caused by atrazine, which is a herbicide, the following stand out: stomach cancer, non-Hodgkin lymphoma, prostate cancer, thyroid cancer, ovarian cancer, Parkinson's disease, asthma, wheezing, infertility, low semen quality, congenital malformations, and damage to liver cells. The insecticide acephate, in turn, is cytotoxic and genotoxic to human spermatozoa and is associated with type 2 diabetes, hyperglycemia, lipid metabolism dysfunction, DNA damage, and cancer. (Bombardi, 2023, p. 58).

Thus, for the purposes of structuring the analysis and delimiting the scope, this section will emphasize the following aspects: i) Competence and independence in the registration process; and ii) Risk reassessment/reanalysis.¹²

The choice of these points is due to the greater sensitivity of these themes, which are crucial in pesticide regulation. This sensitivity is demonstrated by the fact that out of the 14 presidential vetoes to the new law that were overturned by the National Congress, more than half pertain to the registration process or risk reanalysis. This shows how the normative provisions on these topics are points of dissent.

1.1 Competence and Independence of the Environmental, Agricultural, and Health Agencies in Pesticide Registrations in Brazil

Even during the processing in the National Congress, one of the main points of tension between environmental movements and agribusiness sectors regarding the new legislation was the use of the term "agrotóxicos".¹³ Although the dispute over which term would be most appropriate extended throughout the long processing of the bill, the denomination "agrotóxico" (pesticide) ultimately prevailed over "defensivos agrícolas" (agricultural defensives), a terminology advocated by the ruralist caucus. However, even though it remained in the new legislation, the term came into force with a new definition.

In the old law, the term pesticide had a broader scope, encompassing products used in the productive sectors of agribusiness, pastures, forests (native or planted), and urban and aquatic environments.¹⁴ In the new law, however, there was a separation in the classification of products used by agribusiness and those used in forests, other ecosystems, and aquatic environments. This is the distinction between "pesticides" and "environmental control products." We will not enter into the

¹² "Reassessment" is the term used in the old legal framework for pesticides in Brazil, while "Reanalysis" is the term used starting from Law No. 14,785/2023.

¹³ Even during the processing of the bill in the National Congress, the term "Pesticide" was questioned by members of the "ruralist caucus." Defenders of agribusiness, these lawmakers worked to have the term "Pesticide" replaced by "Agricultural Defensives" in the new legislation, in a maneuver aimed at diminishing the symbolism of danger associated with these substances. To better understand this discussion, see: Grigori, Pedro. Pesticide, poison, agricultural defensive? Understand the dispute over the name of these agricultural products. Repórter Brasil, Jan. 24, 2019. Available at: <https://reporterbrasil.org.br/2019/01/agrotoxico-veneno-defensivo-entenda-a-disputa-pelo-nome-desses-produtos-agricolas/>. Accessed on: 08/20/2025.

¹⁴ Art. 2, I - pesticides and the like: a) the products and agents of physical, chemical, or biological processes, intended for use in the production sectors, in the storage and processing of agricultural products, in pastures, in the protection of forests, native or planted, and of other ecosystems and also in urban, aquatic, and industrial environments, whose purpose is to alter the composition of flora or fauna, in order to preserve them from the harmful action of living beings considered harmful; b) substances and products.

discussion about the merits of this terminological change here, as it falls outside the scope of this article.¹⁵ What is important for our analysis is to understand how this terminological innovation directly impacts the division of competences for pesticide registration.

The distinction introduced by the new law is not merely about differentiating terminology between products used in agricultural production and those used for forest and water management. By establishing a differentiation based on the product's intended use, the new law removed the binding regulatory competence of the federal environmental and health agencies over products used by agribusiness. In other words, the distinction between "pesticides" and "environmental control products" in the new law was used to formally centralize binding competence in the federal agriculture agency and weaken the participation of the environmental and health agencies in the regulatory process for pesticides intended for agricultural¹⁶ use.

Since the enactment of Law No. 7,802/89, Brazil operated under a tripartite regulatory model for the registration and control of pesticides, with binding participation from the federal environmental agency (Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis - IBAMA), the agriculture agency (Ministério da Agricultura e Pecuária - MAPA), and the health agency (Agência Nacional de Vigilância Sanitária - Anvisa). In this model, IBAMA, MAPA, and Anvisa shared binding competences throughout the entire process of registration, post-registration amendments, and reassessment, with the prerogative to establish the guidelines and requirements to be presented by applicants for registration and reassessment of pesticides commercialized in Brazil.

Thus, there was a multisectoral, synergistic, and more efficient governance structure. Although all agencies were on equal footing, IBAMA addressed environmental issues, MAPA handled agricultural matters, and Anvisa dealt with issues related to human health, leveraging the technical expertise of each agency in the regulatory governance of pesticides in Brazil. Even though the process was extremely complex, the authority to establish requirements was shared among the three agencies, favoring a logic of administrative cooperation for a systematic analysis of pesticides.

Each agency acted within its technical competence, exercising its functions with autonomy and on an equal basis with the others, thereby enabling a regulatory governance system that protected society from exposure to the dangers and risks associated with these substances.

However, the model introduced by Law 14,785/23 breaks with this system. The new law dismantles the tripartite model, and the agriculture agency is elevated to the role of coordinator of the

¹⁵ For a more in-depth understanding of the discussion on the term "pesticides," see: Paschoal (2019).

¹⁶ Art. 4 The federal agency responsible for the agriculture sector is established as the registering agency for pesticides, technical products, and the like, as well as the federal agency responsible for the environment sector as the registering agency for environmental control products, technical products, and the like (Brazil, 2023).

pesticide registration process. The implications of this for the registration process might not change immediately, considering that IBAMA and Anvisa still participate with a certain degree of autonomy. Nevertheless, regarding post-registration amendments, only the registration coordinator decides on the changes requested by the applicant. In other words, in post-registration amendments, IBAMA and Anvisa are demoted to mere supporting players.

In practical terms, based on Article 27, I, II, and III of the Law 14.785/23¹⁷, A pesticide can be registered with a lower toxicological profile, passing through the scrutiny of IBAMA, MAPA, and Anvisa. Then, after approval, the registrant can request a registration amendment to change the product's composition to a higher toxicological profile, with the amendment being analyzed solely by MAPA. Therefore, regardless of what the applicant changes (production process, product specifications, raw materials, other ingredients, or additives), only MAPA will decide on such changes, even if the alterations make the product more harmful to human health and the environment.

In practice, this could turn the registration process into a merely symbolic, façade procedure. After registration, the product's composition can be altered to a higher toxicological profile, and such amendments will be analyzed only by MAPA. In summary, there will be no tripartite analysis of the registration amendment process. The tripartite model is broken, reducing IBAMA and Anvisa to mere consultants without decision-making power. Even if they warn about unacceptable chemical risks to health and the environment, MAPA will not be obligated to follow their recommendations.

Thus, allowing changes to the content of these products without the required binding analysis by IBAMA and Anvisa—agencies that act to protect the diffuse and collective rights to the environment and health—directly violates the principles of prevention, precaution, and the prohibition of socio-environmental regression established in the 1988 Constitution. This dynamic is also repeated in the Risk Reanalysis process.

1.2 Risk Reanalysis

According to the new law, a reanalysis must occur when international organizations responsible for health, food, or the environment, of which Brazil is a member or with which it has signed agreements or conventions, issue warnings about risks or advise against the use of pesticides.¹⁸

¹⁷ Art. 27. The following registration amendments will be technically evaluated by the registering agency: I - production process; (Parts vetoed in the enactment) II - specifications of the technical and formulated product; (Parts vetoed in the enactment) III - change in raw materials, other ingredients, or additives; (Parts vetoed in the enactment) (Brazil, 2023).

¹⁸ Art. 3, § 9 When international organizations responsible for health, food, or the environment, of which Brazil is a member or with which it has signed agreements and conventions, issue warnings about risks or advise against the use of

Provisions on this theme were the subject of four presidential vetoes, all of which were overturned by the national congress.¹⁹ But even with the apparent maintenance of the parameters from the old norm, it is in the process of risk reanalysis that another structural problem brought by Law No. 14,785/2023 and the end of the tripartite model resides.

Still under the previous legal framework, the reanalysis process, previously called "reassessment," had the same starting point: an alert from the international community about the risks of a particular substance, since pesticide registrations in Brazil have no expiration date. The new law, which supposedly aimed to "modernize" pesticide regulation in Brazil, did not change this system that grants pesticide registrations *ad infinitum*, even though best regulatory practices and the precautionary principle itself indicate that substances with high hazard and risk to the environment and human health should not have an indefinite validity period.

In addition to not legally establishing a periodicity for risk reanalysis and advancing towards legislation more protective of human health and the environment, the new legislation also placed MAPA as the coordinator of the risk reanalysis process, relegating IBAMA and Anvisa to the role of issuing advisory opinions only when requested by the agriculture agency. Thus, just like in post-registration amendments, neither IBAMA nor Anvisa have binding power in the risk reanalysis process.

This rearrangement is particularly problematic because the risks related to pesticides can be of three natures: i) reduction of agronomic efficiency; ii) alteration of risks to human health; or iii) alteration of risks to the environment.

Under the previous legal framework, the coordination of the reassessment fell to the agency representing the aspect to be reassessed.²⁰ and depending on the result, the product could have its registration maintained, altered, suspended, or canceled. In the new law, however, the reanalysis is centralized within MAPA even in processes where the suspicion of risk alteration falls on aspects related to human health or the environment. Consequently, MAPA's position is sovereign regardless of its technical competence to evaluate the specific characteristics of the analyzed risk, representing yet another facet of the rupture with the tripartite model.

pesticides, environmental control products, and the like, the competent authority must take measures for risk reanalysis, considering economic and phytosanitary aspects and the possibility of using substitute products.

¹⁹ National Congress. **Veto No. 47/2023** (Flexibilization of pesticide registration). Available at: <https://www.congressonacional.leg.br/materias/vetos/-/veto/detalhe/16209>. Accessed on: 14 Aug. 2025.

²⁰ Brazil. **Joint Normative Instruction No. 2, of September 27, 2006**. Provides for the re-evaluation of pesticides, their components, and related products. *Official Gazette of the Union*: Brasília, DF, Sept. 29, 2006. Available at: <https://www.ibama.gov.br/component/legislacao/?view=legislacao&legislacao=138803>. Accessed on: 20 Aug. 2025.

In practice, Article 29 of Law No. 14,785/2023 subordinates the technical-scientific assessment of environmental and health risks to criteria of productive and economic efficiency. This is because the new law determines that the reanalysis process conducted by MAPA must consider economic aspects, phytosanitary issues, and the possibility of substitute products during the reanalysis. In other words, even when faced with products that are being rejected by the international community and are known to pose risks to human health and the environment, MAPA must still evaluate economic impacts before deciding whether the pesticide should continue to be used in Brazil.

Furthermore, the new law ties restrictive measures on the product to the existence of a phytosanitary plan for replacing the product with a similar one. The sole paragraph of Article 31 stipulates that the most restrictive measures²¹ can only be taken if there is a phytosanitary substitution plan for that product. In this way, the norm shifts the State away from its constitutional duty of environmental and human health protection towards a protection of the agricultural production process, subordinating the promotion of fundamental rights to the security of agribusiness economic interests.

Another sensitive point regarding the reanalysis is that although the active ingredient²² of the pesticide is under reanalysis due to indications of an increased risk from its use, the new law allows new products to be registered containing these components that are under reanalysis, maintaining their commercialization, production, and importation until the reanalysis is concluded. This means that, even in the face of uncertainties about the risks of the active ingredient under reanalysis, the entire production and commercial chain of this product remains unchanged until a conclusive opinion is issued by MAPA.

This logic of protecting the agricultural sector to the detriment of the fundamental rights to health and the environment violates the constitutional principle of precaution and reveals to us how the constitutional legislative process can be instrumentalized to weaken socio-environmental protection, which is a duty of the State guaranteed by the 1988 Constitution.

By shifting the decision-making axis of regulation towards a perspective of economic efficiency, Law No. 14,785/23 not only breaks the technical-administrative balance of the tripartite model but inauguates a new regulatory paradigm with an authoritarian and centralized profile in decision-making, where formal legality is used to erode constitutional guarantees of environmental

²¹ Art. 31 [...] V - restrict commercialization; V - prohibit, suspend, or restrict production or import; VI - prohibit, suspend, or restrict use; VII - cancel or suspend registration.

²² Art. 1, XIV - active ingredient: isolated chemical agent or in a mixture with biologicals that confers efficacy to pesticides, environmental control products, and the like; (Brazil, 2023).

and collective health protection. This dynamic marks the transition point towards a paradigm of abusive environmental constitutionalism in the governance of pesticides in Brazil.

2 NEW PESTICIDE LAW AND ABUSIVE ENVIRONMENTAL CONSTITUTIONALISM

Under the enforcement of the new law, Brazil has set yet another national record for the approval of pesticides.²³ According to data from the Ministry of Agriculture, Livestock and Supply (MAPA), 663 new registrations were approved in 2024, the highest number in the historical series to date and an increase of 19.43% compared to the year 2023.²⁴

As of July 2025, the date of the latest MAPA registration report release, Brazil had already authorized the registration of 405 new pesticides. This means that in just seven months of 2025, the country approved a higher number than all registrations approved throughout the entire year of 2017.²⁵ However, what these numbers, although frightening, do not reveal is how pesticides are vectors of chronic and structural violations of fundamental rights.

By unbalancing the institutional power correlation of the tripartite model to facilitate the circulation of products with high hazard and risk to health and the environment, the new law transcends the environmental issue and stands as evidence of how the State can be instrumentalized through its own constitutional mechanisms to violate the Constitution in the name of private interests, promoting a clear example of abusive environmental constitutionalism.

Landau (2020) defines abusive constitutionalism as the use of democratic constitutional mechanisms to weaken democracy, through constitutional amendments or replacements that attack the constitutional order itself; that is, abusive constitutionalism would be "the use of mechanisms of constitutional change to make a state significantly less democratic than it was before" (Landau, 2020, p. 22). According to Landau (2020), abusive constitutionalism replaces the old practices of militarized coups d'état, which within the contemporary democratic paradigm have lost ground to hybrid coups that instrumentalize legitimate mechanisms of the constitutional order to subvert it from within.

²³ ROSA, João. **Pesticide approvals hit record in 2024**. *CNN Brasil*, Brasília, Jan. 28, 2025. Available at: <https://www.cnnbrasil.com.br/politica/liberacao-de-agrotoxicos-bate-recorde-em-2024/>. Accessed on: Sept. 8, 2025.

²⁴ BRAZIL. Ministry of Agriculture and Livestock. **Technical Information on Pesticides**. Published on Feb. 10, 2017; updated on Aug. 21, 2025. Available at: <https://www.gov.br/agricultura/pt-br/assuntos/insumos-agropecuarios/insumos-agricolas/agrotoxicos/informacoes-tecnicas>. Accessed on: Sept. 8, 2025.

²⁵ BRAZIL. Ministry of Agriculture and Livestock. **Technical Information on Pesticides**. Published on Feb. 10, 2017; updated on Aug. 21, 2025. Available at: <https://www.gov.br/agricultura/pt-br/assuntos/insumos-agropecuarios/insumos-agricolas/agrotoxicos/informacoes-tecnicas>. Accessed on: Sept. 8, 2025.

According to Barbosa and Filho (2018), abusive constitutionalism can also be seen as a broader interpretative lens "to describe the use of procedures, institutes, and measures proper to constitutional law to undermine or restrict constitutional democracy" (Barboza; Filho, 2018, p. 86). From this perspective, the case of the new pesticide law can be interpreted as a practice of abusive environmental constitutionalism to the extent that the new law is instrumentalized within Brazilian parliamentary constitutional legality to systematically weaken environmental democracy and the fundamental right to an ecologically balanced environment (Landau, 2020; Barboza; Filho, 2018).

Therefore, abusive environmental constitutionalism consists of the manipulation of constitutional and infra-constitutional mechanisms to give form and legal legitimacy to socio-environmental setbacks, subordinating the State's protective function in environmental matters to the defense of economic interests, violating fundamental rights, and weakening the project of ecological democracy foreseen in Article 225 of the 1988 Constitution (Landau, 2020; Barboza; Filho, 2018).

In Law No. 14,785/2023, normative legitimacy serves as a strategy to confer an appearance of constitutionality to the process of environmental degradation promoted by pesticide abuse. Following this line, it is possible to understand the abusive environmental constitutionalism promoted by the new pesticide law through three structural and interdependent dimensions: i) the constitutional; ii) the institutional; and iii) the social.

From a constitutional point of view, the administrative reconfiguration caused by the end of the tripartite model violates the constitution both formally and materially. Formally, because it legislates on matters that are the exclusive purview of the President of the Republic, as provided for in Articles 61, § 1º, II, "b" and 84, VI, "a" of the Constitution. Thus, by providing for the organization and functioning of the federal administration with the objective of privileging the role of the agriculture agency as the "manager" of the pesticide regulation process in Brazil and ending the tripartite model, the new law incurs formal unconstitutionality, in addition to violating the principle of separation of powers and administrative legality.

The Brazilian Federal Supreme Court (STF) has settled jurisprudence stating that laws of parliamentary initiative that modify the competence and functioning of executive branch administrative agencies are formally unconstitutional. An example is the understanding established in ADI 4288, in which Minister Alexandre de Moraes stated that the legislative process of parliamentary initiative that modifies the competence and functioning of administrative agencies is formally unconstitutional.

But beyond formal unconstitutionality, the end of the tripartite model is also materially unconstitutional because it weakens the environmental function of the Brazilian State and

compromises the legal regime of socio-environmental protection provided for in the 1988 Constitution, chronically violating the principles of prevention, precaution, and the prohibition of environmental regression.

The principle of prevention, one of the main foundations of contemporary environmental law, seeks to protect society by avoiding environmental damages that are already known and foreseeable according to available scientific knowledge.

According to Sarlet and Fensterseifer (2021, p. 617), "the principle of prevention operates with the objective of anticipating the occurrence of environmental damage at its source, thus preventing it from occurring." In other words, the principle of prevention dictates that norms must safeguard society from environmental risks that are already avoidable thanks to scientific advancement. However, although the dangers and risks associated with pesticides in Brazil are widely recognized by the scientific community.²⁶, a Lei nº 14.785/2023 and establishes a flexible and more permissive legal regulatory regime for these substances.

In addition to violating the principle of prevention, the new pesticide law also violates the constitutional principle of precaution. As Paulo Leme Machado points out (2008, p. 75): "In case of doubt or uncertainty, one must also act preventively. This is the great innovation of the precautionary principle [...] The precautionary principle applies even when uncertainty exists, without waiting for it to become certainty." This means that precaution and prevention go hand in hand to safeguard socio-environmental protection, even in the face of uncertainty about socio-environmental damage.

Sarlet and Fensterseifer (2021) define the precautionary principle as one of the most important pillars of the legal protection of the environment, insofar as it guides legal interpretation towards the responsibility and caution necessary for the protection of life, health, and the environment. The STF has recognized²⁷ the precautionary principle in the Brazilian legal system in Extraordinary Appeal No. 627.189/SP and defined that:

²⁶ Hess *et al.* (2021, p. 119) shows us the adverse effects caused by the main pesticides commercialized in Brazil. Glyphosate, for example, which is the most consumed pesticide in the country, has its exposure associated with health problems such as non-Hodgkin lymphoma, infertility, autism, chronic kidney problems, damage to embryonic and placental cells, programmed death and necrosis of placental, umbilical, and embryonic cells, endocrine disruption in liver cells, proliferation of breast cancer cells, and damage to liver cells.

²⁷ In a related context, in Theme 479, the Brazilian Supreme Federal Court (STF) ruled on the risks associated with exposure to electromagnetic fields generated by electric power transmission lines. Applying the precautionary principle, the Court decided that, given the scientific uncertainties regarding the harmful effects of such exposure, international safety standards should be adopted to prevent potential risks to public health. The thesis established holds that, at the current stage of scientific knowledge—which indicates uncertainty as to the existence of harmful effects resulting from occupational and general population exposure to electric, magnetic, and electromagnetic fields generated by electric power systems—there are no legal impediments to adopting the parameters proposed by the World Health Organization, as provided for in Law No. 11,934/2009. Available at: <<https://portal.stf.jus.br/jurisprudenciaRepercussao/verAndamentoProcesso.asp?incidente=3919438&numeroProcesso=627189&classeProcesso=RE&numeroTema=479>> Accessed on: Sept. 8, 2025.

o princípio da precaução é um critério de gestão de risco a ser aplicado sempre que existirem incertezas científicas sobre a possibilidade de um produto, evento ou serviço desequilibrar o meio ambiente ou atingir a saúde dos cidadãos, o que exige que o estado analise os riscos, avalie os custos das medidas de prevenção e, ao final, execute as ações necessárias, as quais serão decorrentes de decisões universais, não discriminatórias, motivadas, coerentes e proporcionais (STF, 2017).

However, the application of the precautionary principle does not occur in pesticide policy. With Law No. 14,785/2023, substances under reanalysis, suspected of causing unknown risks to human health or the environment, can continue to be used and commercialized normally without any restriction until MAPA issues an opinion, which directly violates the precautionary principle.

More broadly, the new pesticide law also violates the principle of prohibition of socio-environmental regression, which, according to the understanding of the STF in ADPF No. 748:

o princípio da vedação ao retrocesso ambiental afasta a possibilidade de que alterações legislativas ou regulamentares venham a eliminar a proteção ambiental sobre determinados ecossistemas ou a dispensar a fiscalização ambiental sobre determinados empreendimentos com potencial degradante, por configurar uma involução na proteção ao meio ambiente que não se justifica perante o ordenamento jurídico (STF, 2022).²⁸

According to the Supreme Court's jurisprudence, socio-environmental regression represents a regression in the legal regime for environmental protection. This regression is formalized through norms that are unconstitutional both formally and materially, but it is enabled through the institutional pathway. This is what is happening in the new legal framework for pesticides in Brazil.

From an institutional point of view, the new law promotes abusive environmental constitutionalism by ending the tripartite model, which marks an institutional shift in the state's function from environmental protection to the protection of the agro-industrial sector. That is, the new legal regime for pesticides ceases to promote the precautionary principle in order to guarantee the production of *commodities*²⁹ and facilitate the functioning of the logic of neo-extractivism implemented in Brazil, where the State acts as the guarantor of the institutional and normative structure capable of providing the legal security that lends a veneer of legality to the socially abusive economic practices of the agribusiness sectors, even if they represent socio-environmental setbacks that are constitutionally prohibited.

²⁸ This understanding is consistent with the Court's broader environmental jurisprudence, as reaffirmed in **ADPF 748/DF**, in which the STF emphasized the constitutional duty of the State to protect health and the environment in situations of scientific uncertainty. Available at: <<https://portal.stf.jus.br/processos/detalhe.asp?incidente=6018018>>. Accessed on: Sept. 8, 2025.

²⁹ With regard to agricultural use, soybeans, corn, and cotton together account for approximately 80% of all pesticides marketed in Brazil. Soybean cultivation alone absorbed 57% of pesticide sales in 2021. Overall, nearly 90% of the pesticides in circulation in the country are applied to only five crops: soybeans, corn, cotton, pasture, and sugarcane (Bombardi, 2023, p. 17).

In this sense, the concentration of institutional power over pesticides in MAPA evidences this distortion of the State's duty of environmental protection, breaking with the logic of tripartite management to promote management based on the protection of markets. This reveals the influence of agribusiness in state policy and shows how the constitutional legislative process can be captured to reconfigure and institutionalize the defense of private interests that contradict the Constitution and the principles of socio-environmental democracy.

The old law, for example, provided in its Article 5 the possibility of popular control over pesticides through the legal provision for requests for cancellation or impugnation of pesticides by class entities in the sector, political parties, and legally constituted entities for the defense of diffuse interests related to consumer protection, the environment, and natural resources. This was an important mechanism for controlling the adverse effects of these substances. However, in the new law, this important tool for participation that enabled social control over pesticides was discontinued.

Law No. 14,785/2023, even after a year of its enactment, still lacks a regulatory decree. The absence of a regulatory decree leaves various institutional gaps in the pesticide regulatory process. This administrative vacuum also constitutes an abuse to the extent that these gaps hinder inspection mechanisms, transparency, and control in the sector's regulation, in addition to generating legal uncertainty, since the new law largely contradicts the still-in-force Decree No. 4,074/02.

Given all this, it is necessary to critically understand this institutional rearrangement and perceive that it is not socially neutral, considering that its consequences are suffered differently depending on certain conditions of social vulnerability.

Bombardi (2023) warns us about how social inequalities further deepen exposure to the negative externalities of these products. In practice, the burden of abusive environmental constitutionalism in pesticide policy falls more severely on certain social groups, such as rural populations, family farmers, children, pregnant women, indigenous peoples, quilombolas, and other traditional communities, who suffer greater exposure and have less capacity to defend themselves against the interests of the agro-industrial complex.

This unequal distribution of socio-environmental damage constitutes a chronic and structural violation of fundamental rights and transforms the territories of traditional communities and family farming into sacrifice zones.³⁰ socio-environmental: spaces where life and territory are deconstitutionalized and do not hold the status of equals belonging to the constitutional national pact

³⁰ Sacrifice zones are characterized as localities where the thirst for economic development at any cost prevails to the detriment of high levels of social and ecological degradation. These extraction "zones" are subject to various forms of ecological destruction (water, air, land, fauna, and flora) and are usually implemented in places occupied by subalternized people (Black, Indigenous, poor people), who have their human rights "sacrificed" in the name of the supposed development brought by large-scale extractivist economic activity (Viégas, 2006).

before the Brazilian State, in order to enable a predatory economic development agenda (Viégas, 2006; Sousa, 2021).

An event that illustrates how chronic violations of fundamental rights occur through chemical violence and more severely affect traditional communities and their territories is the case of aerial spraying of pesticides, a method of dispersing these products that is increasingly advancing across the national territory and carries with it the marks of chemical risk and rural violence.

The "Zé Maria do Tomé" case, in the State of Ceará, is an emblematic example of how rural family farming communities are more exposed to direct chemical risk (acute and chronic intoxications resulting from direct and indirect exposure to pesticides) and to the social and environmental violence that accompanies it.

José Maria was a farmer and community leader from Ceará who fought against the aerial spraying of pesticides in the Chapada do Apodi region (CE), a practice José called the "rain of poison." The community leader played a fundamental role in the movement that resulted in the enactment of a municipal law prohibiting the aerial spraying of pesticides in the city of Limoeiro do Norte (CE). According to a report on the case of José Maria:

empresas do agronegócio tinham na pulverização aérea a forma mais viável de expurgar veneno em seus cultivos de banana, expondo o ambiente, os trabalhadores e os moradores aos riscos de contaminação. É nesse contexto que emerge a figura de Zé Maria do Tomé, um camponês que se voltou contra a prática da pulverização aérea e mobilizou as comunidades, entidades, movimentos populares e universidades na luta contra o uso de agrotóxicos" (Brasil de Fato, 2021, s/p).

Unfortunately, José Maria's fight for the preservation of the environment and rural ways of life came to a tragic end when he was assassinated on April 21, 2010, with 25 shots in an ambush motivated by his activism against the abusive use of pesticides in his region. According to the Public Ministry of Ceará, Zé Maria was killed with 25 gunshots on the orders of a local landowner who opposed José Maria's struggle³¹

Ten years after this tragic episode, in 2019, the State of Ceará enacted Law No. 16,820/2019, named the "Zé Maria do Tomé Law," which prohibited the aerial spraying of pesticides in agriculture in the State of Ceará. The law was promptly challenged before the STF and became the subject of ADI 6137, filed by the Confederation of Agriculture and Livestock of Brazil – CNA, on the grounds

³¹ G1 Ceará. **Zé Maria do Tomé Case:** the defendant accused of killing an environmental activist who fought against pesticides goes to trial 14 years later. *G1*, October 9, 2024. Available at:

<https://g1.globo.com/ce/ceara/noticia/2024/10/09/caso-ze-maria-do-tome-acusado-de-matar-ambientalista-que-lutava-contra-agrotoxicos-vai-a-julgamento-14-anos-depois.ghtml>. Accessed on: August 24, 2025.

that the law would violate "Arts. 1, IV; 170, caput and IV; and 187, all of the Constitution of the Republic, which protect economic freedom, freedom of initiative, and agrarian activity" (STF, 2019).

However, according to Minister Carmen Lúcia, the rapporteur of the ADI at the STF, she recognized³² the constitutionality of the law because it is a norm that offers a more protective regime for human health and the environment, implementing the precautionary principle and reinforcing the need for the issue of pesticides to be treated systemically, taking into consideration not only economic aspects but also human health and the environment, as determined by the Constitution itself in its Article 170, which states that the economic order must develop in conjunction with environmental protection.

Thus, it is possible to see that the new Pesticide Law is not neutral in its social effects: it aggravates structural inequalities and legitimizes differential exposure to chemical risk, creating socio-environmental sacrifice zones that more violently affect certain bodies and territories. This is the structural dynamic of abusive environmental constitutionalism: a model of legality that promotes socio-environmental degradation within the legal form while the most vulnerable populations bear the socio-environmental costs of agribusiness.

In this way, it is concluded that the abusive environmental constitutionalism of Law No. 14,785/2023 operates simultaneously on three fronts: the constitutional, by formally and materially violating the 1988 Constitution; the institutional, by concentrating technical and political powers in MAPA, dismantling the tripartite model, and distancing social control from pesticide regulation; and the social, by deepening ecological inequalities and chronically exposing vulnerable groups to the dangers and chemical risks associated with these substances.

3 ALTERNATIVES FROM ECOLOGICAL CONSTITUTIONALISM

³² The prohibition of the aerial spraying of pesticides is a matter pertaining to health and the environment, listed among the common administrative competences and the concurrent legislative competences of the Union, the States, and the Municipalities (items II and VI of art. 23; items VI and XII of art. 24, all of the Constitution of the Republic). 3. Law No. 7,802/1989 is explicit in preserving the legislative competence of the States to regulate "the use, production, consumption, commerce, and storage of pesticides." There is no obstacle preventing States from enacting norms more protective of health and the environment regarding the use of pesticides. National regulation is limited to establishing general parameters on the matter, coordinating activities and integrated actions. Precedents: ADI n. 3470, DJe Feb. 1, 2019; RE n. 761.056, DJe Mar. 20, 2020; RE n. 286.789/RS, DJ Apr. 8, 2005. 4. Free initiative does not prevent the State from regulating economic activities, especially when such regulation proves indispensable for safeguarding other values esteemed by the Constitution, such as human dignity, the valorization of human labor, free competition, the social function of property, the defense of consumers and the environment, and the pursuit of full employment. 5. The challenged norm is not proven to be unreasonable nor does it escape the juridical proportionality between the right to free initiative and the right to health and an ecologically balanced environment, establishing a reasonable and proportional restriction on pesticide application techniques in the State of Ceará, following the scientific confirmation of the risks involved in the aerial spraying of pesticides (STF, 2023).

It is within this paradigm of abusive environmental constitutionalism that ecological constitutionalism inserts itself as a proposal for a theoretical-normative praxis capable of promoting a model of ecological democracy in the governance of the chemical risk promoted by pesticides in Brazil. Ecological constitutionalism offers not only a critical interpretative perspective on the pesticide problem but also a repertoire of institutional and normative solutions capable of redirecting pesticide regulation in Brazil towards the parameters established by the 1988 Constitution and minimizing the structural nature of the problem.

Undoubtedly, ecological constitutionalism has limitations in the face of the structural problem of the neo-extractivist development model, which increasingly punishes peripheral countries with the chemical colonialism promoted by the externalization of the risks of commodity production. This is especially true considering that Brazil is the main global destination for pesticides and that its economy is deepening increasingly into peripheral-dependent dynamics³³ over the years. (Marini, 2000; Lessenich, 2019; Bombardi, 2023).

Thus, although ecological constitutionalism cannot change the material conditions of Brazil's chemically dependent capitalism, it provides us with tools to understand the need for systemic protection of nature and to propose alternatives. There is, therefore, no way to speak of a fundamental right to an ecologically balanced environment for present and future generations without speaking of restrictions on economic practices that cause the death of people and ecosystems and expel the protectors of nature, fauna, and flora from their natural habitat (Sassen, 2016; 2020).

Sampaio (2016) reconstructs the evolutionary process of the constitutionalization of the environment, showing how the environmental issue evolved within constitutions across three cycles, moving from constitutionalism of the intention to protect the environment to an anthropocentric constitutionalism of the human right to the environment, and finally to ecological constitutionalism, which considers nature as a proper subject of rights within a broader perspective and embedded in the conception of all fundamental rights (Sampaio, 2016).

According to Sampaio (2016, p. 84), ecological constitutionalism "would define itself with the proclamation of 'post-human environmental rights' or 'environmental rights in the strict sense.'" This turn was directly influenced by the movement of the new Latin American constitutionalism,

³³ In Brazil, there is a broad predominance of multinational companies holding the registration for pesticides containing active ingredients not authorized for use in the European Union, which constitutes a violation of the human rights of the Brazilian population. This type of unequal treatment by these multinational companies is seen as discriminatory or even racist in terms of biosecurity, since they practice restrictive legislation in their countries of origin that is not adopted in the peripheral countries of their economy (Hess et al., 2024).

where, by the force of influence of the indigenous worldview of *buen vivir* (or *sumak kawsay*)³⁴ occurred the recognition of the rights of nature in the Constitution of Ecuador, considered the fundamental paradigm of the ecocentric turn in constitutionalism.

Iacovino (2020) defines ecological constitutionalism as a system of constitutional protection that reflects a new way of thinking about the interaction between society and the environment, where the legal protection of nature is not transgressed due to economic interests in nature's exploitation. It is, therefore, an ecocentric perspective, which surpasses the anthropocentric paradigm, in which:

el ser humano deja de ser el centro del universo, modifica radicalmente sus relaciones con la naturaleza y transforma toda la estructura normativa de protección ambiental; esto también implica la adopción de una perspectiva holística de comprensión de la vida, humana y no humana, que supone desafíos y quiebra antiguos paradigmas filosóficos y jurídicos. Además, la incapacidad de ver el ambiente separado de los otros aspectos de la sociedad exige una acción global y conjunta capaz de concebirlo como un bien colectivo de goce al mismo tiempo individual y general, como un verdadero derecho "transindividual" (Iacovino, 2020, p. 278).³⁵

In contrast to the mitigated anthropocentrism that still structures contemporary Western environmental law, ecological constitutionalism emerges as an alternative that recognizes the relationship of interdependence between nature, society, the economy, and fundamental rights. It repositions the ecological dimension at the center of constitutional normativity without subjecting it to the imperatives of capital accumulation interests.

From this perspective, ecological constitutionalism can operate at three complementary levels for reconstructing pesticide policy in Brazil: i) the hermeneutic-normative; ii) the institutional; and iii) the political-social.

From a hermeneutic-normative point of view, ecological constitutionalism presupposes that all constitutional interpretation concerning pesticides, even if it brings economic impacts, must be guided by an environment seen systemically. It should consider the values of socio-environmental democracy and the principles of prevention, precaution, and the prohibition of regression, insofar as the realization of all fundamental rights is not possible in a degraded environment.

³⁴ *Sumak Kawsay* (or *Suma Qamaña* – an Aymara term used in Bolivia) is inspired by the traditional Andean indigenous postulate on the social necessity to achieve a "good life," understood as being founded on harmonious relationships both between human beings and nature, as well as in harmonious relationships among the components of human societies themselves. It is assumed that both the human/environmental relationship (which is a part/whole relationship) and the human/human relationship are interconnected (Houtart, 2011, our translation).

³⁵ Free translation: "The human being ceases to be the center of the universe, radically modifies its relationship with nature, and transforms the entire normative structure of environmental protection; this also implies the adoption of a holistic perspective for understanding life, human and non-human, which supposes challenges and breaks with old philosophical and legal paradigms. Furthermore, the inability to see the environment as separate from other aspects of society requires a global and joint action capable of conceiving it as a collective good for individual and general use, as a true 'transindividual' right" (Iacovino, 2020, p. 278).

Based on this, the STF must advance the agenda of combating chemical risk already initiated in ADI No. 6137 and declare the unconstitutionality of Law No. 14,785/23 in ADI 7701. It should recognize that the new pesticide law promotes a socio-environmental regression that increases the chemical risk borne by Brazilian society and is incompatible with the 1988 Constitution

But beyond being a hermeneutic lens in the scope of constitutional review, this interpretative criterion must serve as a concrete limit to legislative activity in environmental matters. This would prevent new episodes of abusive environmental constitutionalism and ensure that future laws do not repeat the logic of socio-environmental regression found in Law No. 14,785/2023.

From an institutional aspect, ecological constitutionalism implies the reconfiguration of pesticide policy governance structures based on administrative cooperation, transparency, and social control. This necessarily means restoring the tripartite model and the binding participation of MAPA, IBAMA, and Anvisa in the entire pesticide regulatory process. Furthermore, it is essential to ensure that these substances undergo periodic reanalysis processes, with increasingly protective standards regarding the environment and human health, so that no pesticide in Brazil has infinite validity.

At the political-social level, ecological constitutionalism presupposes the democratization of pesticide policy through effective social participation in its control mechanisms. This includes creating deliberative bodies that allow popular participation in the pesticide regulation process, especially by communities directly affected by chemical risk.

Moreover, parallel to this democratic opening in the governance of agricultural chemical inputs, it is necessary to promote the effectiveness of the National Policy on Agroecology and Organic Production³⁶ and the National Program for Pesticide Reduction, with concrete measures to promote the agroecological transition through incentives for research in bio-inputs, sustainable agroforestry management, and technical-financial support for family farmers. All of this must be combined with the effective implementation of a popular agrarian reform policy that guarantees access to land and the effectiveness of the social function of property as provided for in the 1988 Constitution.

By articulating these three dimensions, it is possible to achieve a shift from an abusive environmental constitutionalism to an ecological constitutionalism that promotes the practical translation of the constitutional duty to protect ecological integrity and foster socio-environmental justice.

³⁶ BRAZIL. Decree No. 7,794, of October 11, 2012. Provides for the entry and activities of foreigners in the country, registration, residence, documentation, and the administrative process for the removal of foreigners. *Official Gazette of the Union (Diário Oficial da União)*: Section 1, October 12, 2012. Available at: https://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/decreto/d7794.htm. Accessed on: October 2, 2025.

4 FINAL CONSIDERATIONS

A The analysis developed throughout this article allows us to state that Law No. 14,785/2023 relaxes the pesticide regulatory process in Brazil and leverages the constitutional structure to promote an abusive environmental constitutionalism in the country's pesticide policy. Instead of perfecting the pesticide regulation system, the new law reconfigures the role of the State, transforming it into a protector of agribusiness interests.

Albeit with unconstitutional aspects, the new law promotes socio-environmental regression, primarily through the rupture of the tripartite pesticide regulation model. This movement, by privileging sectoral economic interests to the detriment of the State's duties of environmental protection and the principles of precaution and prevention, promotes what we term here as abusive environmental constitutionalism. This consists of the manipulation of the structure of constitutional legality to weaken the very guarantees of the 1988 Constitution.

This abuse manifests in three interdependent dimensions: the constitutional, the institutional, and the social. On the constitutional plane, we observed the violation of the 1988 Constitution. On the institutional plane, we observed the weakening of regulation through the dismantling of the tripartite model. In the social dimension, we verified that the relaxation of controls intensifies socio-ecological injustices, increasing the exposure to chemical risk of the most vulnerable groups.

Given this reality, the article proposed ecological constitutionalism as a theoretical, hermeneutic-normative, institutional, and political-social horizon for the reconstruction of pesticide policy in Brazil.

From this perspective, confronting abusive environmental constitutionalism in pesticide policy through ecological constitutionalism requires concrete and interdependent measures, such as: i) the declaration of the unconstitutionality of Law No. 14,785/2023; ii) the restoration of the tripartite model, with technical decisions mandatorily shared among health, environment, and agriculture agencies; iii) the establishment of maximum validity periods and periodic reanalyses for all pesticide registrations; iv) the strengthening of social participation and transparency; and v) the promotion of the agroecological transition and popular agrarian reform, integrating credit policies, research, and the valorization of organic production.

Thus, more than a normative proposal, ecological constitutionalism constitutes an agenda for refunding not only pesticide policy but the very legitimacy of the State in promoting ecological justice, repositioning human, and non-human lives at the center of the 1988 constitutional project.

REFERENCES

BARBOZA, E. M. Q.; FILHO, I. N. R. Constitucionalismo Abusivo: Fundamentos Teóricos e Análise da sua Utilização no Brasil Contemporâneo. **Revista Brasileira de Direitos Fundamentais & Justiça**, [S. l.], v. 12, n. 39, p. 79–97, 2019. DOI: 10.30899/dfj.v12i39.641. Disponível em: <https://dfj.emnuvens.com.br/dfj/article/view/641>. Acesso em: 19 out. 2025.

BOMBARDI, Larissa Mies. **Agrotóxicos e colonialismo químico**. Editora Elefante, 2023.

BRASIL. **Ação Direta de Inconstitucionalidade (ADI) 4288**. Relator: Min. Edson Fachin; Relator para acórdão: Min. Alexandre de Moraes. Tribunal Pleno do Supremo Tribunal Federal. Julgamento em 29 jun. 2020. Disponível em: <<https://portal.stf.jus.br/processos/detalhe.asp?incidente=2696224>>. Acesso em: 15/09/25.

BRASIL. Constituição (1988). **Constituição da República Federativa do Brasil de 1988**. Diário Oficial da União: Brasília, DF, 5 out. 1988.

BRASIL. **Decreto nº 4.074, de 4 de janeiro de 2002**. Regulamenta a Lei nº 7.802, de 11 de julho de 1989, que dispõe sobre a pesquisa, a experimentação, a produção, a embalagem e rotulagem, o transporte, o armazenamento, a comercialização, a propaganda comercial, a utilização, a importação, a exportação, o destino final dos resíduos e embalagens, o registro, a classificação, o controle, a inspeção e a fiscalização de agrotóxicos, seus componentes e afins, e dá outras providências. Diário Oficial da União: Brasília, DF, 8 jan. 2002.

BRASIL. **Lei nº 14.785, de 27 de dezembro de 2023**. Dispõe sobre a pesquisa, a produção, a comercialização, a utilização, o controle, a inspeção e a fiscalização de pesticidas, produtos de controle ambiental e afins, e dá outras providências. Diário Oficial da União: Brasília, DF, 28 dez. 2023.

BRASIL. **Lei nº 7.802, de 11 de julho de 1989**. Dispõe sobre a pesquisa, a experimentação, a produção, a embalagem e rotulagem, o transporte, o armazenamento, a comercialização, a propaganda comercial, a utilização, a importação, a exportação, o destino final dos resíduos e embalagens, o registro, a classificação, o controle, a inspeção e a fiscalização de agrotóxicos, seus componentes e afins, e dá outras providências. Diário Oficial da União: Brasília, DF, 12 jul. 1989.

CARSON, Rachel. **Silent Spring**. Mariner Books, New York: 2002.

CARVALHO, Miguel Mundstock Xavier de; NODARI, Eunice Sueli; NODARI, Rubens Onofre. “Defensives” or “pesticides”? A history of the use and perception of pesticides in the state of Santa Catarina, Brazil, 1950-2002. **História, Ciências, Saúde-Manguinhos**, v. 24, p. 75-91, 2017.

CARVALHO, Miguel Mundstock Xavier de; NODARI, Eunice Sueli; NODARI, Rubens Onofre. “Defensivos” ou “agrotóxicos”? História do uso e da percepção dos agrotóxicos no estado de Santa Catarina, Brasil, 1950-2002. **História, Ciências, Saúde-Manguinhos**, v. 24, n. 1, p. 75-91, 2017.

CONGRESSO NACIONAL. **Veto nº 47/2023 (Flexibilização de registro de agrotóxicos)**. Disponível em: <<https://www.congressonacional.leg.br/materias/vetos/-/veto/detalhe/16209>>. Acesso em: 14/08/2025.

FAOSTAT. **Production – FAOSTAT**. Disponível em: <<https://www.fao.org/faostat/en/#data/RP/visualize>>. Acesso em: 14/08/2025.

GRIGORI, Pedro. **Agrotóxico, veneno, defensivo? Entenda a disputa pelo nome desses produtos agrícolas.** *Repórter Brasil*, 24 jan. 2019. Disponível em: <<https://reporterbrasil.org.br/2019/01/agrotoxico-veneno-defensivo-entenda-a-disputa-pelo-nome-desses-produtos-agricolas/>>. Acesso em: 20/08/2025.

HOUTART, François. **El concepto de Sumak Kausay (Buen vivir) y su correspondencia com el bien común de la humanidad.** Ecuador Decide, n. 84, p.57-72, 2011.

IACOVINO, Angela. Constitucionalismo ecológico en América Latina: de los derechos ambientales a los derechos de la naturaleza. **Cultura Latinoamericana**, v. 31, n. 1, p. 266-320, 2020.

LANDAU, David. Constitucionalismo abusivo. **Revista Jurídica da UFERSA**, v. 4, n. 7, p. 17-71, 2020.

LEONEL JÚNIOR, Gladstone; HELMOLD, Pedro. Os trinta anos da Constituição Federal diante de uma política agrária “agrotóxico-dependente”. **Revista de Direito Agrário**, Rio de Janeiro, ano, v. 21, p. 193-214, 2018.

LESSENICH, Stephan. **La sociedad de la externalización.** Herder Editorial, 2019.

LIGNANI, Leonardo de Bem; BRANDÃO, Júlia Lima Gorges. A ditadura dos agrotóxicos: o Programa Nacional de Defensivos Agrícolas e as mudanças na produção e no consumo de pesticidas no Brasil, 1975-1985. **História, Ciências, Saúde – Manguinhos**, Rio de Janeiro, v.29, n.2, abr.-jun. 2022, p.337-359.

MACHADO, Paulo Afonso Leme. **Direito ambiental brasileiro.** 16. ed. São Paulo: Malheiros, 2008.

MARINI, R. M. **Dialética da dependência.** Petrópolis: Vozes, 2000.

MORCEIRO, Paulo César. **Desindustrialização na economia brasileira no período 2000-2011: abordagens e indicadores.** Cultura Acadêmica, 2012.

PASCHOAL, Adilson Dias. **Pragas, agrotóxicos e a crise ambiente: problemas e soluções.** Expressão Popular, 2019.

PELAEZ, Victor; TERRA, Fábio Henrique Bittes; DA SILVA, Letícia R. A regulamentação dos agrotóxicos no Brasil: entre o poder de mercado e a defesa da saúde e do meio ambiente. **Revista de Economia**, v. 36, n. 1, p. 27-48, 2010.

RIBEIRO, Gustavo Lins. Ambientalismo e desenvolvimento sustentado. Nova ideologia/utopia do desenvolvimento. **Revista de antropologia**, p. 59-101, 1991.

ROSA, João. **Liberação de agrotóxicos bate recorde em 2024.** CNN Brasil, Brasília, 28 jan. 2025. Disponível em: <<https://www.cnnbrasil.com.br/politica/liberacao-de-agrotoxicos-bate-recorde-em-2024/>>. Acesso em: 08/09/2025.

SAMPAIO, José Adércio Leite. Os ciclos do constitucionalismo ecológico. **Revista Jurídica da UNI7**, v. 13, n. 2, 2016.

SARLET, Ingo Wolfgang; FENSTERSEIFER, Tiago. **Algumas notas sobre a dimensão ecológica da dignidade da pessoa humana e sobre a dignidade da vida em geral.** 2008.

SARLET, Ingo Wolfgang; FENSTERSEIFER, Tiago. **Direito Constitucional Ecológico:** constituição, direitos fundamentais e proteção da natureza. 6. ed. Rev. atual. e ampl. São Paulo: Thomson Reuters Brasil, 2021.

SASSEN, Saskia. A massive loss of habitat: New drivers for migration. **Sociology of Development**, v. 2, n. 2, p. 204-233, 2016.

SASSEN, Saskia. **Expulsões: brutalidade e complexidade na economia global**. Editora Paz e Terra, 2020.

SOUSA, Maria Sueli Rodrigues de. **Vivências constituintes: sujeitos desconstitucionalizados**. Teresina: Avant Garde, 2021.

TERRA, F. A Indústria de Agrotóxicos no Brasil. Curitiba: Dissertação de Mestrado, Universidade Federal do Paraná, Programa de Pós-Graduação em Desenvolvimento Econômico, 2008.

VIÉGAS, Rodrigo Nuñez. **Desigualdade ambiental e “zonas de sacrifício”**. Mapa dos Conflitos Ambientais no Estado do Rio de Janeiro, v. 21, 2006.

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