

The evolution of pesticide legislation in Brazil: from environmental protection to agricultural competitiveness

Abstract

This article analyzes the transition of pesticide regulation in Brazil, comparing the historical framework of Law No. 7,802/1989 with the recent Law No. 14,785/2023. While the previous legislation focused on intrinsic hazards and ecosystem safety, the new regulatory environment prioritizes expository risk analysis and agricultural competitiveness. The study discusses the implications of these changes, highlighting the 30% increase in registrations in 2025 and the potential risks to human health and the environment in a market driven by immediate profit.

Keywords: pesticides, environmental protection, Law No. 7,802/1989, Law No. 14,785/2023

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Introduction

Brazil has established itself as one of the world's largest grain producers, according to data from the FAO.¹ This leading role is driven by public policies incentivizing agriculture, especially through rural credit programs such as the Plano Safra (Crop Plan), which contributed to transforming the country into an agricultural powerhouse. However, this production model relies heavily on the extensive use of pesticides, as highlighted by Vipieviski Júnior et al.²

Data from the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA) bulletin indicate that 825,793.5 tons of pesticides were sold in Brazil in 2024. Of the 10 most sold products in Brazil, 6 are banned in the European Union. Glyphosate and its salts, the most consumed product, is considered carcinogenic.

Brazilian legislation regarding the import, export, production, commercialization, and use of pesticides dates back to 1934, with Decree No. 24,114/1934, which remained in force for 55 years. Law No. 7,802/1989, known as the Pesticides Law (*Lei dos Agrotóxicos*), established a more modern and comprehensive regulatory framework. Subsequently, new regulations were incorporated, culminating in Law No. 14,785/2023, which was referred to as the "Poison Package" (*pacote do veneno*) while moving through the Brazilian Congress. The new law updates and reorganizes aspects of the evaluation and registration process for these products.³⁻⁵

Methodology

This study employs a qualitative and descriptive approach based on a comparative documentary analysis of Brazilian federal pesticide legislation. The primary sources include Law No. 7,802/1989, and Law No. 14,785/2023 to identify regulatory shifts. Additionally, quantitative data were retrieved from official reports of IBAMA, the Ministry of Agriculture and Live Stock (MAPA), and the FAO¹ to contextualize the impact of these legislative changes.

Results and discussions

The transition in the Brazilian regulatory framework reflects a shift from an environmental protection focus to a model centered on agricultural competitiveness. Table 1 summarizes the primary changes between Law No. 7,802/1989 and Law No. 14,785/2023

Table 1 presents a comparison between Law 7,802 of 1989 and Law 14,785 of 2023.

Table 1 Comparison of main changes in Brazilian pesticide regulation

Feature	Law No. 7,802/1989	Law No. 14,785/2023
Terminology	Agrotóxicos (Agrochemicals)	Agrotóxicos (Pesticides)
Decision-making on registration	Shared decision with equal veto power between the Ministry of Agriculture, Ministry of Health, and Ministry of the Environment.	Ministry of Agriculture (with opinions from the Ministries of Health and Environment). The final decision lies with the Ministry of Agriculture.
Registration Criteria	Intrinsic Hazard: If a substance presented teratogenic, carcinogenic, or mutagenic characteristics, it was automatically prohibited, regardless of the dose or form of use.	Expository Risk Analysis: Prohibition only occurs if the risk is considered unacceptable. This means that even if a molecule is hazardous, if science proves that the mode of application (PPE, dosage, application technology) keeps exposure below a safe limit, it can be authorized.
Deadlines	There were no strict deadlines, leading to waiting lists of up to 8 to 10 years for a registration.	Establishes deadlines of up to 24 months. Creates a "Temporary Registration" if the deadline is not met.
Main Focus	Ecosystem Safety	Agility and Competitiveness

Source: (Brazil, 1989; Brazil, 2023)

Based on economic criteria, the alteration of the legislation aims to promote simplified entry into Brazilian territory,⁶ ignoring aspects of human health and environmental protection. As pointed out in the

table above, under Law 7,802/1989, products classified as teratogenic or carcinogenic would be prohibited in the country. Under the new legislation, these products may be registered provided they present acceptable risks. What is considered an acceptable risk?. What guarantees that rural workers will be exposed to safe doses of these agrochemicals?

The result of the legislative change can be perceived by the progressive increase in approved registrations. In 2025, 587 pesticides were registered, a 30% increase compared to 2024.⁷ Of these, 36.6% are considered very dangerous to the environment, 29.8% dangerous to the environment, 1.4% highly dangerous to the environment, and 32.2% are considered slightly dangerous.

With the signing of international free trade agreements, new requirements will be established regarding the use of agricultural substances. Brazilian agriculture will face the challenge of innovating in the face of a market focused exclusively on immediate profit without concern for the future.⁸

Conclusion

The evolution of pesticide legislation in Brazil reveals a deliberate transition from a framework rooted in ecosystem safety and the precautionary principle to one driven by agricultural competitiveness and administrative agility. While Law No. 7,802/1989 prohibited substances based on their intrinsic hazards, such as carcinogenic or teratogenic potential, the new Law No. 14,785/2023 introduces a model of expository risk analysis. This shift has already resulted in a significant 30% increase in registrations in 2025, with a high percentage of products classified as dangerous to the environment. Ultimately, the challenge for Brazilian agriculture lies in balancing immediate economic profit with the long-term protection of human health and environmental integrity, ensuring that “acceptable risk” does not translate into unacceptable consequences for rural workers and biodiversity.

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Conflicts of interest

This work does not involve any conflicts of interest for the author.

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